



# Mark Scheme (Results)

Summer 2024

Pearson Edexcel International Advanced Level  
In Economics (WEC11) Paper 01  
Unit 1: Markets in Action

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## General Marking Guidance

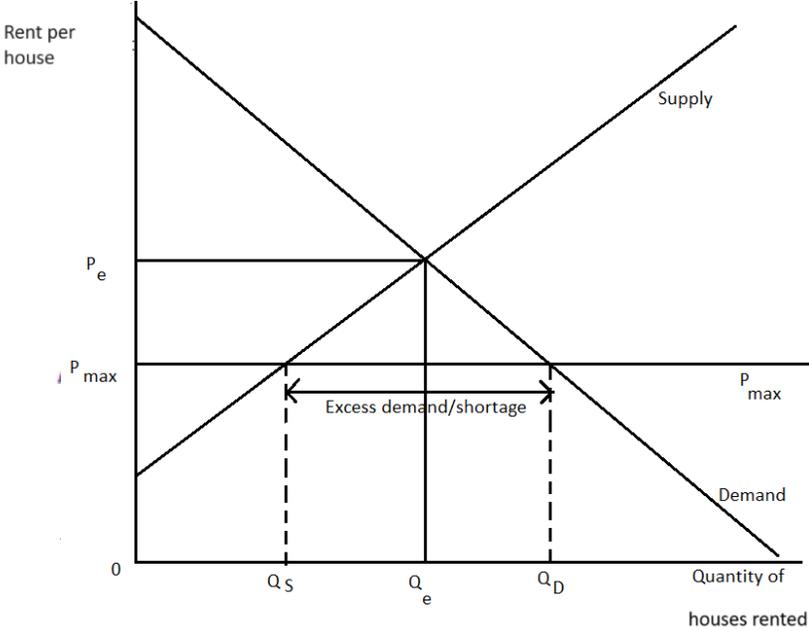
- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should 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	Quantitative skills assessed	Answer	Mark
1	<p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is B</b></p> <p><b>A</b> is not correct because an economic good has an opportunity cost</p> <p><b>C</b> is not correct because when providing a public good other items may be sacrificed</p> <p><b>D</b> is not correct because investing in a capital good has an opportunity cost in terms of consumer goods</p>	(1)
2	<p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is A</b></p> <p><b>B</b> is not correct because the excess supply of permits will result in the price decreasing</p> <p><b>C</b> is not correct because the cost of buying permits will decrease</p> <p><b>D</b> is not correct because there is less incentive to invest in cleaner technology when permits are cheaper</p>	(1)
3	<p><b>QS8:</b> Make calculations of elasticity and interpret the result</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is D</b></p> <p><b>A</b> is not correct because there is no information on income elasticity of demand</p> <p><b>B</b> is not correct because substitute goods have a positive XED</p> <p><b>C</b> is not correct because the value of XED is not zero</p>	(1)
4	<p><b>QS4:</b> Construct and interpret a range of standard graphical forms</p> <p><b>QS8:</b> Make calculations of elasticity and interpret the result</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is C</b></p> <p><b>A</b> is not correct because the PED will be 0</p> <p><b>B</b> is not correct because the PED will be between 0 and -1</p> <p><b>D</b> is not correct because the PED will be -infinity</p>	(1)

<p><b>5</b></p>	<p><b>QS2</b> Calculate, use and understand percentages, percentage changes and percentage point changes  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is B</b></p> <p><b>A</b> is not correct because Denmark generated more non-renewable resources in 2010 and more renewable resources in 2021  <b>C</b> is not correct because a higher proportion of electricity was generated from non-renewable resources in 2010  <b>D</b> is not correct because a higher proportion of electricity was generated using renewable resources in 2021</p>	<p><b>(1)</b></p>
<p><b>6</b></p>	<p><b>QS2</b> Calculate, use and understand percentages, percentage changes and percentage point changes  <b>QS8:</b> Make calculations of elasticity and interpret the result  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p>	<p><b>The only correct answer is A</b></p> <p><b>B</b> is not correct because the supply of new houses would decrease  <b>C</b> is not correct because the supply of new houses would decrease  <b>D</b> is not correct because the PES has been divided by the price change</p>	<p><b>(1)</b></p>

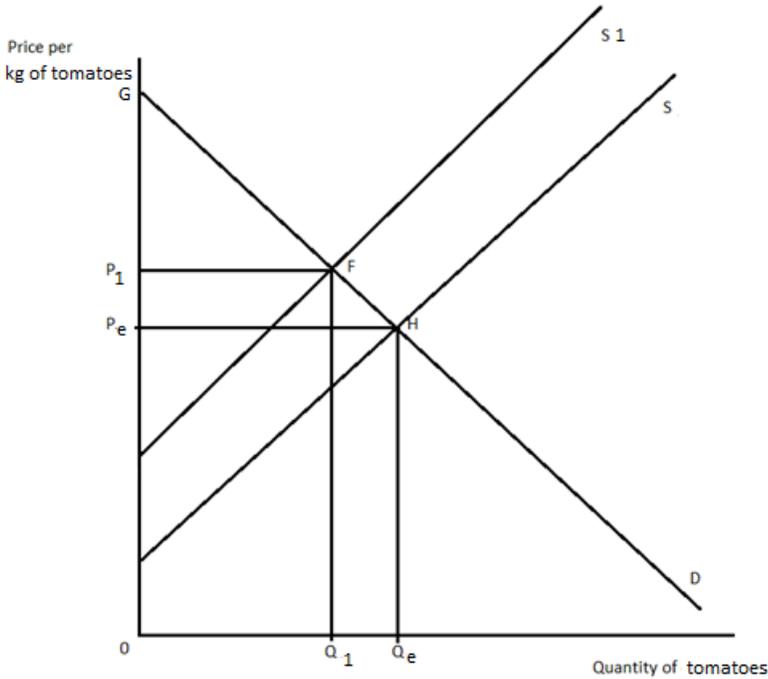
**Section B**

Question	With reference to the house rental market in Brisbane, draw a diagram to illustrate the introduction of a maximum price for renting a house.	Mark
<b>7</b>	<p><b>Answer</b></p> <p><b>Knowledge 1, Application 3</b>            Quantitative skills assessed:  <b>QS4:</b> Construct and interpret a range of standard graphical forms  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge</b></p> <p>1 mark for showing knowledge on diagram</p> <ul style="list-style-type: none"> <li>• Original supply and demand with correctly labelled axes <b>(1)</b></li> </ul> <p><b>Application</b></p> <p>Up to 3 marks for the following information included on diagram:</p> <ul style="list-style-type: none"> <li>• Maximum price below equilibrium price <b>(1)</b></li> <li>• <math>Q_D</math> and <math>Q_S</math> at maximum price <b>(1)</b></li> <li>• Excess demand/shortage <b>(1)</b></li> </ul> <div style="text-align: center;">  </div> <p><b>N.B. The market equilibrium is not necessarily required</b></p>	<b>(4)</b>

<b>Question</b>	With reference to hotel breakfasts, explain why the above information illustrates 'diminishing marginal utility'.	<b>Mark</b>
<b>8</b>	<p><b>Answer</b></p> <p><b>Knowledge 1, Application 1, Analysis 2</b></p> <p>Quantitative skills assessed:</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge</b></p> <p>1 mark for understanding of 'diminishing marginal utility'</p> <ul style="list-style-type: none"> <li>• 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 <b>(1)</b></li> </ul> <p><b>Application</b></p> <p>1 mark for reference to data</p> <ul style="list-style-type: none"> <li>• 80% of hotel guests go to the buffet three times / Only 10% visit five times <b>(1)</b></li> </ul> <p><b>Analysis</b></p> <p>Up to 2 marks for analysis e.g.</p> <ul style="list-style-type: none"> <li>• 90% of hotel guests are satiated/full after consuming the 4<sup>th</sup> bowl/plate of food <b>(1)</b> so do not consume the 5<sup>th</sup> bowl/plate <b>(1)</b></li> <li>• The last bowl/plate of food consumed increases total utility <b>(1)</b> but the gain in utility is smaller than for the last bowl <b>(1)</b></li> </ul>	<b>(4)</b>

Question	With reference to lighthouses, explain the difference between 'non-rivalry' and 'non-excludability'.	Mark
9	<p><b>Answer</b></p> <p><b>Knowledge 2, Application 2</b></p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge</b></p> <p>1 mark for definition of non-rivalry e.g.:</p> <ul style="list-style-type: none"> <li>• Where the consumption by one person does not reduce the benefit for another person/ where people can consume a good without affecting the benefit derived by others <b>(1K)</b></li> </ul> <p>1 mark for definition of non-excludability e.g.:</p> <ul style="list-style-type: none"> <li>• Where you cannot prevent another person from consuming the same good / when it is impossible to provide a good without others being able to benefit from it <b>(1K)</b></li> </ul> <p><b>Application</b></p> <p>Up to 2 marks for applying to stem e.g.:</p> <ul style="list-style-type: none"> <li>• 24 300 lighthouses globally / Number of losses of ships at sea reduced from 109 to 38 <b>(1AP)</b></li> <li>• Lighthouses are a public good <b>(1AP)</b></li> <li>• The consumption of light from a lighthouse by one ship does not reduce the light available to other ships at sea <b>(1AP)</b></li> <li>• One ship's consumption of light does not exclude/prevent another ship consuming the same light <b>(1AP)</b></li> </ul>	(4)

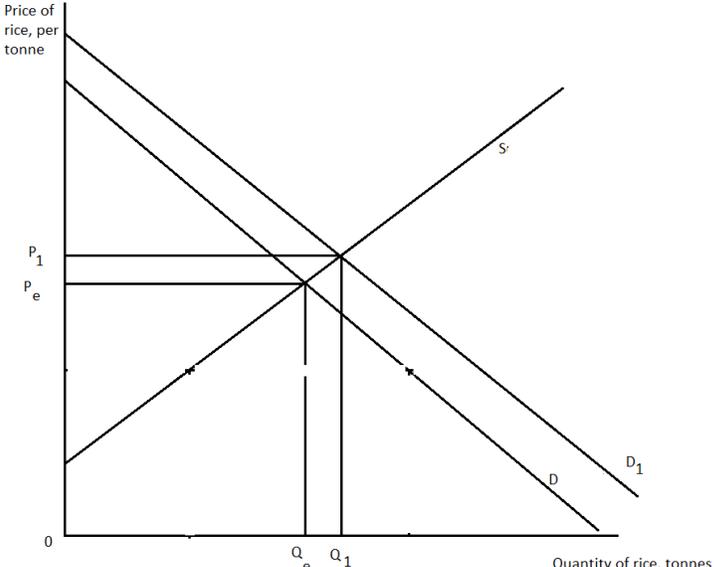
<b>Question</b>	<i>Ceteris paribus</i> , calculate the income elasticity of demand for new cars. Show your workings.	<b>Mark</b>
<b>10</b>	<p><b>Answer</b></p> <p><b>Knowledge 1, Application 3</b>  Quantitative skills assessed:  <b>QS2</b> Calculate, use and understand percentages, percentage changes and percentage point changes  <b>QS8:</b> Make calculations of elasticity and interpret the result.  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p> <p><b>Knowledge</b>  1 mark for definition/the formula income elasticity of demand  <math display="block">\frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}} \quad \text{(1)}</math></p> <p><b>Application</b>  Up to 3 marks for calculations:</p> <ul style="list-style-type: none"> <li>• Change in quantity of car sales  <math>23.56\text{m} - 21.52\text{m} = 2.04</math>  Change in quantity <math>\div</math> original quantity <math>\times 100</math>  <math>2.04\text{m} \div 21.52\text{m} \times 100 = 9.48\%</math> <b>(1) 9.4795539033</b></li> <li>• Change in income  <math>114\,029 - 106\,837 = 7\,192</math>  Change in income <math>\div</math> original income <math>\times 100</math>  <math>7\,192 \div 106\,837 \times 100 = 6.73\%</math> <b>(1) 6.7317502363</b></li> </ul> <p><math display="block">\frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}</math></p> <p><math display="block">\frac{9.48}{6.73}</math>  <math display="block">= +1.41 \text{ (1)}</math></p> <p><b>Accept reasonable rounding e.g.</b>  <math display="block">\frac{9.5}{6.7}</math>  <math display="block">= +1.42</math></p> <p><b>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.</b></p> <p><b>Accept reasonable rounding from full calculation</b>  <b>If 1.41% or -1.41 is given award 3 marks</b></p>	<b>(4)</b>

Question	<p><i>Ceteris paribus</i>, explain the likely impact of this change in supply on the consumer surplus in the tomato market.</p> <p>Illustrate your answer with a supply and demand diagram.</p> <p><b>Answer</b></p>	Mark
11	<p><b>Knowledge 1, Application 1, Analysis 2</b></p> <p>Quantitative skills assessed:  <b>QS4:</b> Construct and interpret a range of standard graphical forms  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge</b></p> <p>1 mark for definition of consumer surplus e.g.:</p> <ul style="list-style-type: none"> <li>The difference between the market price and the price at which the consumers are willing to buy/pay <b>(1)</b></li> </ul> <p><b>Application</b></p> <p>1 mark for correct shift of supply to the left <b>(1)</b></p>  <p><b>Accept perfectly inelastic supply curves for each year</b></p> <p><b>Analysis</b></p> <p>Up to 2 marks for showing the change in consumer surplus</p> <p>Original consumer surplus <math>GHP_e</math> <b>(1)</b></p> <p>New consumer surplus <math>GFP_1</math> <b>(1)</b></p> <p><b>OR</b></p> <p>Consumer surplus decreases <b>(1)</b> by <math>FHP_eP_1</math> <b>(1)</b></p>	(4)

**Section C**

<b>Question</b>	Define the term 'capital goods'. (Extract C, line 5)	<b>Mark</b>
<b>12 (a)</b>	<b>Answer</b> <b>Knowledge 2</b> Up to 2 marks for understanding of 'capital goods.' e.g.: <ul style="list-style-type: none"><li>• Man-made aids to production <b>(1)</b></li><li>• Used in the production of other capital goods or consumer goods <b>(1)</b></li><li>• Spending on machinery/buildings/vehicles <b>(1)</b></li><li>• Goods that increase productive potential /shifts PPF to the right <b>(1)</b></li><li>• Indian Government subsidies are used by farmers to invest in capital goods <b>(1)</b></li></ul>	<b>(2)</b>

Question	With reference to Figure 1 and Extract A, analyse <b>two</b> reasons why the price of rice increased between July 2022 and July 2023. Illustrate your answer with a supply and demand diagram.  <b>Answer</b>	Mark
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<p><b>12 (b)</b></p>	<p><b>Knowledge 2, Application 2, Analysis 2</b></p> <p>Quantitative skills assessed:  <b>QS4:</b> Construct and interpret a range of standard graphical forms  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.  <b>Knowledge</b>  Up to 2 marks for the diagram showing:</p> <ul style="list-style-type: none"> <li>• Original supply, demand and equilibrium price and quantity <b>(1)</b></li> <li>• New higher equilibrium price and quantity having only shifted demand <b>(1)</b></li> </ul> <p><b>Analysis</b>  Up to 2 marks for reasons from Extract A</p> <ul style="list-style-type: none"> <li>• Rice consumption in Africa and Asia is growing rapidly <b>(1)</b></li> <li>• As populations grow/In 2022 the population grew by 2.45% in Africa and 0.83% in Asia <b>(1)</b></li> <li>• Incomes rose/ In 2022 the average economic growth rate was 4% in Asia and 3.85% in Africa <b>(1)</b></li> </ul> <p><b>Application</b>  1 mark for diagram and 1 mark for reference to Figure 1.:</p> <ul style="list-style-type: none"> <li>• Shift demand curve to the right <b>(1)</b></li> <li>• Figure 1- price index rises from 108.4 to 129.7 between July 2022 and July 2023/ increased by over 19.6%/ 21.3 increase in the index <b>(1)</b></li> </ul> 	<p><b>(6)</b></p>
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Question	With reference to Figure 2, explain whether demand for <b>each</b> of the four selected food groups is price elastic or price inelastic. <b>Answer</b>	Mark
12 (c)	<p><b>QS8:</b> Make calculations of elasticity and interpret the result.  <b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge 2 Application 2</b></p> <p><b>Knowledge</b>  1 mark for definition of price elastic demand:</p> <ul style="list-style-type: none"> <li>• A value between -1 and <math>-\infty</math>/ a larger than proportional change in quantity demanded to a change in price <b>(1)</b></li> </ul> <p>1 mark for definition of price inelastic demand</p> <ul style="list-style-type: none"> <li>• A value between 0 and -1/ a smaller than proportional change in quantity demanded to a change in price <b>(1)</b></li> </ul> <p><b>Application</b>  Up to 2 marks for application:</p> <ul style="list-style-type: none"> <li>• Demand for vegetables, fish and meat is price inelastic <b>(1)</b></li> <li>• Demand for rice is price elastic <b>(1)</b></li> </ul>	<b>(4)</b>

Question	With reference to Extract B, examine <b>two</b> external costs associated with rice production. <b>Answer</b>	Mark
12(d)	<p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms</p> <p><b>Knowledge 2, Application 2, Analysis 2, Evaluation 2</b></p> <p><b>Knowledge and Analysis</b></p> <p>2 knowledge marks for identifying external costs and 2 analysis marks for linked explanation of each external cost, e.g.:</p> <ul style="list-style-type: none"> <li>• Additional emissions may cause global warming <b>(1K)</b> 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 <b>(1AN)</b></li> <li>• Rice production leaves less water in the natural environment <b>(1K)</b> meaning animals and humans find it more difficult to find water for consumption <b>(1AN)</b></li> <li>• Insecticides kill off insects/ bees reducing the amount of honey/crops produced <b>(1K)</b> reducing the revenue and profits of beekeepers/farmers <b>(1AN)</b></li> <li>• Respiratory problems <b>(1K)</b> resulting in additional health costs to the individual and government <b>(1AN)</b></li> <li>• Up to 1 mark for definition of external costs or accurate diagram showing external costs of production</li> </ul> <p><b>Application</b></p> <p>Up to 2 marks for external costs with application to Extract B</p> <ul style="list-style-type: none"> <li>• 12% of global methane emissions/ 1.5% of all greenhouse gas emissions/ Vietnam's paddy fields produce more carbon emissions than its transport network <b>(1AP)</b></li> <li>• 1 kg of rice requires 2 500 litres of water/ Rice uses 33% of the world's irrigation water <b>(1AP)</b></li> <li>• Insecticides resulted in a 44% decline in bee population in the USA <b>(1AP)</b></li> </ul> <p><b>Evaluation</b></p> <p>Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.:</p> <ul style="list-style-type: none"> <li>• 90% of rice is consumed within the country reducing emissions from transporting rice <b>(1)</b></li> <li>• Difficult to quantify external costs, putting a value on the impact on third parties e.g. farmers, bee keepers <b>(1+1)</b></li> <li>• Substantial impact e.g. 12% global methane emissions/2 500 litres of water <b>(1+1)</b></li> <li>• The external costs may only be experienced in the long-run as it takes a long time for the third party impact to emerge e.g. climate change <b>(1+1)</b></li> <li>• There may be external benefits, such as employment associated with rice production <b>(1+1)</b></li> <li>• The magnitude of the external costs may be small as only 1.5% of global emissions contributed by rice <b>(1+1)</b></li> </ul>	<b>(8)</b>

<b>Question</b>	With reference to Extract C, discuss the benefits of subsidies paid to rice growers. Illustrate your answer with an appropriate diagram.
<b>Indicative content</b>	

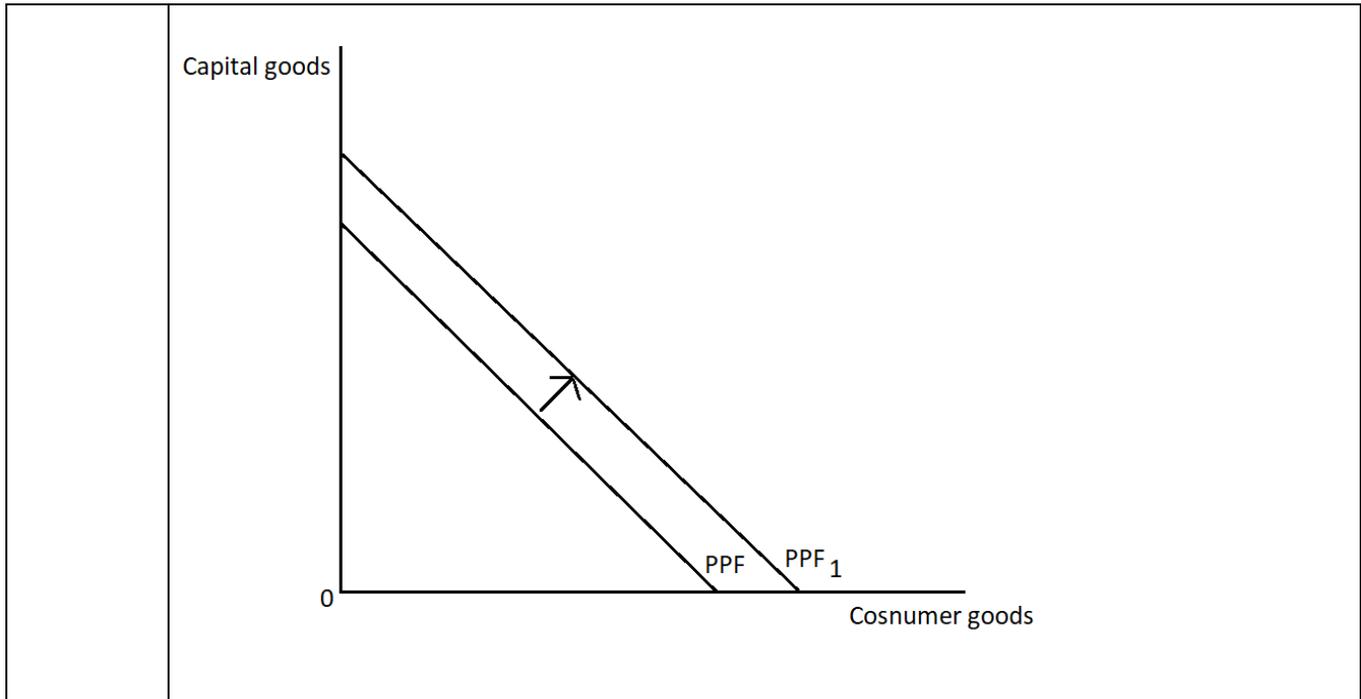
<b>12(e)</b>	<p><b>Indicative content guidance</b></p> <p>Answers must be credited by using the level descriptors (below) in line with the general marking guidance.</p> <p>The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.</p> <p><b>Quantitative skills assessed</b></p> <p><b>QS4:</b> Construct and interpret a range of standard graphical forms</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Knowledge, Application and Analysis (8 marks) – indicative content</b></p> <ul style="list-style-type: none"> <li>• Subsidies - cash grant to encourage production and consumption</li> <li>• Reduces costs of production for rice growers</li> <li>• Subsidy is used for capital goods, fertiliser and water</li> </ul> <p>Subsidy diagram</p> <p><b>Consumers</b></p> <ul style="list-style-type: none"> <li>• Price paid lowers from <math>P_e</math> to <math>P_1</math></li> <li>• Consumer surplus increases from <math>ABP_e</math> to <math>ACP_1</math></li> <li>• Quantity consumed increases from <math>Q_e</math> to <math>Q_1</math></li> </ul> <p><b>Producers</b></p> <ul style="list-style-type: none"> <li>• Increase in amount received increases from <math>OP_e</math> to <math>OG</math> for each item sold</li> <li>• Producers' revenue increases from <math>OP_eBQ_e</math> to <math>OGEQ_1</math></li> <li>• Producer subsidy is <math>EFP_eG</math></li> </ul>
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	<ul style="list-style-type: none"> <li>Producers increase quantity sold, from <math>Q_e</math> to <math>Q_1</math></li> </ul> <p>Government</p> <ul style="list-style-type: none"> <li>Increased welfare of its citizens as they can now access cheaper rice</li> <li>Popular amongst farmers</li> <li>Boosts export revenue income that can be used to buy capital goods and other imports</li> <li>Boosts rice production creating economic growth</li> </ul> <p>Workers</p> <ul style="list-style-type: none"> <li>Higher output, results in more workers being needed</li> <li>Creates more job security whilst the subsidy is paid</li> <li>Producers have more revenue so can afford to pay more</li> </ul>	
Level	Mark	Descriptor
	0	No rewardable material
<b>Level 1</b>	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.
<b>Level 2</b>	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.
<b>Level 3</b>	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.
		<p><b>Evaluation (6 marks) – indicative content</b></p> <ul style="list-style-type: none"> <li>Magnitude- depends on the level of the subsidy set- if too low then little impact on economic agents</li> </ul> <p>Consumers</p> <ul style="list-style-type: none"> <li>Higher output may cause land to become less fertile and quality of the rice to fall</li> <li>Will not benefit those that prefer varieties grown in other countries</li> <li>Depends on the proportion of rice that makes up an Indian consumer's diet</li> </ul> <p>Producers</p> <ul style="list-style-type: none"> <li>May become reliant on the subsidy</li> <li>May struggle if the subsidy is removed</li> <li>May see a decline in the quality of the crop and the amount they can actually sell</li> </ul>

	<ul style="list-style-type: none"> <li>Increased water use/fertiliser use reduces availability for farmers of other crops</li> </ul> <p>Government</p> <ul style="list-style-type: none"> <li>Spending by the government will be the area ECP<sub>1G</sub>, cost \$6.9bn in 2021</li> <li>Opportunity cost- the money spent on rice subsidies cannot be used elsewhere</li> <li>Removing the subsidies is difficult- resulted in mass protests and the subsidy was reinstated</li> </ul> <p>Workers</p> <ul style="list-style-type: none"> <li>If the subsidy is removed and output falls- risk of job losses</li> <li>May keep workers in low-skilled jobs for longer</li> </ul>	
Level	Mark	Descriptor
	0	No rewardable material.
<b>Level 1</b>	1–2	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
<b>Level 2</b>	3–4	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
<b>Level 3</b>	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**

<b>Question</b>	Evaluate possible factors that could cause a rightward shift of a country's production possibility frontier. Include at least one relevant diagram in your answer.  Indicative content
<b>13</b>	<p><b>Quantitative skills assessed</b></p> <p><b>QS4:</b> Construct and interpret a range of standard graphical forms</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Indicative content guidance</b></p> <p>Answers must be credited by using the level descriptors (below) in line with the general marking guidance.</p> <p>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.</p> <p><b>Knowledge, application and analysis (12 marks) – indicative content</b></p> <ul style="list-style-type: none"><li>• PPF- shows the maximum possible production using all available resources</li></ul> <p>Factors that could cause a rightward shift of a country's PPF</p> <ul style="list-style-type: none"><li>• Population increase from 9.4m to 14.1m (UAE)/12.1m to 18.8m (Bolivia)/113.9m to 180.2m (Philippines) increases the size of the available workforce</li><li>• More immigration- increases the size of the labour force and production possibilities</li><li>• Offering more work visas, offer payments to migrants may encourage immigration, increasing labour force</li><li>• Families having more children, will eventually result in larger workforce</li><li>• Use of benefits, subsidies and tax breaks to encourage families to have more children, to increase workforce</li><li>• Investment in capital goods will increase productivity</li><li>• Use of subsidies and tax breaks to encourage investment in capital goods</li><li>• More research and development will result in better production processes increasing output</li><li>• Encourage research and development- helping to improve innovation and increasing productive potential</li><li>• Development of artificial intelligence may replace tasks completed by humans</li><li>• Increase spending on education to develop skills to improve productivity</li><li>• Increase spending on healthcare to improve health- reducing time lost to absenteeism, sickness</li><li>• Increase retirement age so people stay in the labour market for longer</li><li>• Reduce school leaving age so that people start to become productive earlier</li><li>• Offer training courses to improve skills and productivity</li><li>• Discovery of new natural resources</li></ul> <p>PPF diagram- accept straight line or curved PPFs</p>



**NB Award maximum of Level 3 if no diagram is included**

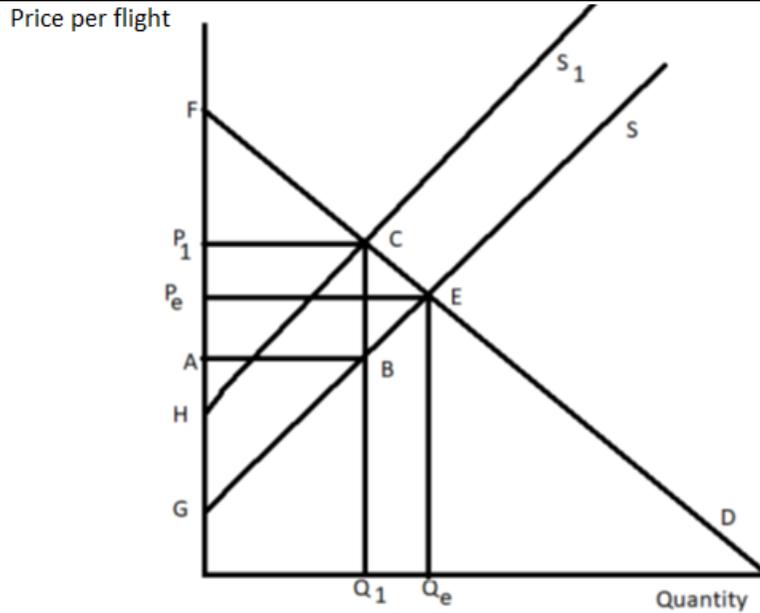
Level	Mark	Descriptor
	0	No rewardable material.
<b>Level 1</b>	1-3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
<b>Level 2</b>	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.
<b>Level 3</b>	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.
<b>Level 4</b>	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**

- Immigrating to a country may not be attractive if jobs are not available in the right areas
- Immigration may cause pressure on public services
- If immigrants do not find suitable opportunities productive potential will not rise
- Payments to migrants create an opportunity cost
- Financial rewards for having more children are unlikely to exceed the costs of having more children
- Subsidies to encourage investment in capital goods create opportunity costs
- Much research and development is unproductive and not all ideas will improve production possibilities
- Artificial intelligence may come with unknown risks and costs
- Spending on education may be in the wrong areas- resulting in smaller impact on productive potential
- Increase in spending on healthcare will only have an impact if it is preventative
- Increasing the retirement age may cause unrest as people are forced to work longer
- If people leave education earlier they may be less skilled
- Possible information failure, government failure if training is in wrong areas
- Time lag e.g. long delay between increased birth rate and increased production possibilities

Level	Mark	Descriptor
	0	No rewardable material.
<b>Level 1</b>	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
<b>Level 2</b>	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
<b>Level 3</b>	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.

<b>Question</b>	<p>Evaluate the likely impact of imposing indirect taxes on aeroplane flights to reduce carbon emissions. Include at least one relevant diagram in your answer.</p> <p><b>Indicative content</b></p>
<b>14</b>	<p><b>Quantitative skills assessed</b>  <b>QS4:</b> Construct and interpret a range of standard graphical forms</p> <p><b>QS9:</b> Interpret, apply and analyse information in written, graphical, tabular and numerical forms.</p> <p><b>Indicative content guidance</b>  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.</p> <p><b>Knowledge, application and analysis (12 marks) – indicative content</b></p> <ul style="list-style-type: none"> <li>• Definition of indirect taxation- expenditure tax</li> <li>• Specific tax/Ad valorem tax- <ul style="list-style-type: none"> <li>○ Increase costs of production</li> <li>○ Shifts/pivots supply to the left, S to S<sub>1</sub></li> <li>○ Increased equilibrium price charged to consumers P<sub>e</sub> to P<sub>1</sub></li> <li>○ Decreases equilibrium quantity of flights for consumers, Q<sub>e</sub> to Q<sub>1</sub></li> <li>○ Reduced quantity of aeroplane flights will result in a reduction in fuel use and in total global carbon emissions. Therefore there will be a reduction in external costs</li> <li>○ Tax revenue received by the government ABCP<sub>1</sub></li> <li>○ Use tax revenue to fund research into technology to reduce emissions/ fund alternatives</li> <li>○ Producer surplus decreases/ airline/ airport profits fall</li> <li>○ Consumer surplus decreases FEP<sub>e</sub> to FCP<sub>1</sub></li> </ul> </li> </ul>



Accept ad valorem diagrams to illustrate the effects of the indirect tax  
 Accept externalities diagram to illustrate effects of indirect tax

**NB Award maximum of Level 3 if no diagram is included**

**Level 4 requires at least two impacts**

**Advantages may be presented as KAA and disadvantages as EV or vice versa**

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<b>Level 2</b>	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.
<b>Level 3</b>	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.

<b>Level 4</b>	10–12	<p>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models.</p> <p>Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question.</p> <p>Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</p>
<p><b>Evaluation (8 marks) – indicative content</b></p> <ul style="list-style-type: none"> <li>• Depends on the size of the tax</li> <li>• Highly inelastic demand for flights means relatively small impact on quantity</li> <li>• Different effects on those travelling for business/leisure</li> <li>• Information failure- government may not know the ideal rate of taxation</li> <li>• Government failure- if it leads to net welfare loss</li> <li>• Any measures to reduce flights may be offset by increases in the number of people using cars or lorries. Therefore, there may be little reduction in external costs</li> <li>• Following the global health crisis, significant numbers have continued to work remotely-reduces the need to fly. Even without imposing indirect taxes the total number of aeroplane flights is likely to have fallen below 2019 levels. Therefore, global carbon emissions may already be below 2.5%</li> </ul>		
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	0	No rewardable material.
<b>Level 1</b>	1–3	<p>Identification of generic evaluative comments.</p> <p>No supporting evidence/reference to context.</p> <p>No evidence of a logical chain of reasoning.</p>
<b>Level 2</b>	4–6	<p>Evidence of evaluation of alternative approaches.</p> <p>Some supporting evidence/reference to context.</p> <p>Evaluation is supported by a partially-developed chain of reasoning.</p>
<b>Level 3</b>	7–8	<p>Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement.</p> <p>Appropriate reference to evidence/context.</p> <p>Evaluation is supported by a logical chain of reasoning.</p>