

Mark Scheme (Results)

May 2023

Pearson Edexcel International GCSE in

**Economics** 

(4EC1/01)

Paper 1: Microeconomics and

**Business Economics** 

## **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information, please visit our website at <a href="https://www.edexcel.com">www.edexcel.com</a>.

Our website subject pages hold useful resources, support material and live feeds from our subject advisors giving you access to a portal of information. If you have any subject specific questions about this specification that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

www.edexcel.com/contactus

## Pearson: helping people progress, everywhere

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: <a href="https://www.pearson.com/uk">www.pearson.com/uk</a>

June 2023

Question Paper Log Number P74056RA

Publications Code 4EC1\_01\_2306\_MS

All the material in this publication is copyright

© Pearson Education Ltd 2023

## **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.

Question number	Which <b>one</b> of the following might have caused the movement from PPF <sub>1</sub> to PPF <sub>2</sub> in Figure 1 above? <b>Answer</b>	Mark
1(a)	AO2 1 mark	
	The only correct answer is:	
	B Positive economic growth	
	A is not correct because this would shift the PPF inwards	
	C is not correct because it does not show long-run average costs	
	increasing with a rise in output	
	D is not correct because it does not show long-run average costs	
	decreasing with a rise in output	(1)

Question number	A firm has total costs of \$10 000 and sells each item at a price of \$100. It sells 200 items. What is the <b>profit or loss</b> for the firm?	Mark
	Answer	
1(b)	AO2 1 mark	
	The only correct answer is:  B \$10 000 profit  A is not correct because total costs have not been deducted C is not correct because a profit would be made and not a loss D is not correct because this is \$10 000 - \$20 000	(1)

Question	What is meant by the term privatisation?	Mark
number	Answer	
1(c)	AO1 2 marks	
	Award 1 mark for reference to moving from the public sector and 1 mark for reference to transfer of ownership to the private sector  The government sells/transfers an organisation (in the public sector) (1) to the private sector (1)	
	Accept any other appropriate response	(2)

Question number	State <b>one</b> reason why the government regulates competition in the economy. <b>Answer</b>	Mark
1(d)	AO1 1 mark  Award 1 mark for a correct reason  To promote competition To limit monopoly power To protect consumer interests To control mergers and takeovers  Accept any other appropriate response	(1)

Question	Define the term congestion.	Mark
number	Answer	
1(e)	AO1 1 mark	
	Award 1 mark for a correct definition	
	A situation where a place is crowded	
	Accept any other appropriate response	(1)

Question number	Calculate the <b>total variable costs</b> for the firm each month. You are advised to show your working. <b>Answer</b>	Mark
1(f)	AO2 2 marks	
	Award 1 mark for showing correct calculation €16 500 + €95 000 <b>(1)</b>	
	Award 1 mark for correct total variable costs €111 500 (1)	
	Award 2 marks if total variable costs per month are correctly calculated as €111 500, even if no calculations are shown	
	Award 1 mark for 111 500 with or without calculations shown	
	Do not award marks for a formula	(2)

Question number	Using the diagram below, draw the likely effects on the market for apples following an increase in the advertising of apples. Label the new curve, the new equilibrium price and the new equilibrium quantity.  Answer	Mark
1(g)	AWard 1 mark for rightward shift of demand, labelled Award 1 mark for higher equilibrium price, labelled Award 1 mark for higher equilibrium quantity, labelled  Price of apples  P1  Pe  Qe Q1  Quantity of apples	(3)

Question number	Explain <b>one</b> advantage of using division of labour for the firm. <b>Answer</b>	Mark
1(h)	AO2 3 marks	
	Award 1 mark for identifying an advantage Award 1 mark for developing the response Award 1 mark for the response being in context	
	<ul> <li>Production is more efficient (1) because workers at the factory will not need to change tools repeatedly to do a different task (1) meaning the quantity of tennis balls produced could increase (1)</li> </ul>	
	<ul> <li>Workers specialising in one task become better at that task (1) making them more productive (1) and helping to lower the average costs of producing each tennis ball (1)</li> </ul>	(3)
	Accept any other appropriate response	(3)

Question number	With reference to the data above and your knowledge of economics, analyse how all four factors of production might be used to produce drinking water in the Canary Islands.  Indicative content
1(i)	AO2 (3 marks)/AO3 (3 marks)
	AO2 and AO3
	<ul> <li>The four factors of production are land, labour, capital and enterprise</li> <li>Sea water is a natural resource, which is land</li> </ul>
	The salt is removed by filtering the water through machines in order to make the water drinkable, which is capital
	The process of ensuring all the salt and impurities have been removed from the water is done by labour (production workers)
	Enterprise combines the other factors of production to make sure the water gets to the consumer as a consumable product
	Thus, all four factors of production may be used to produce drinking water as, without any one of them the process would not be completed as efficiently

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul> <li>Demonstrates basic knowledge and understanding by developing relevant points. Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> </ul>
Level 2	3-4	<ul> <li>Demonstrates partial knowledge and understanding by developing relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> </ul>
Level 3	5-6	<ul> <li>Demonstrates clear knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Interpretation of economic information will be excellent, with a thorough analysis of issues (AO3).</li> </ul>

Question	Which <b>one</b> of the following would occur when there are unsold goods	Mark
number	in a market?	
	Answer	
2(a)	AO1 1 mark	
	The only correct answer is:	
	B Excess supply	
	A is not correct because this would lead to a shortage of goods in the market	
	C is not correct because lower prices may be needed to sell unsold goods	
	D is not correct because this would not result from unsold goods in	
	the market	(1)

Question number	Which <b>one</b> of the following statements is correct? <b>Answer</b>	Mark
2(b)	AO1 1 mark	
	The only correct answer is:	
	C Quantity supplied will fall when price falls	
	A is not correct because this is only true when supply is fixed	
	B is not correct because supply is affected by changes in price	
	D is not correct because the supply curve does not shift due to a	
	price change	(1)

Question number	State the name for price elasticity of demand (PED) with a numerical value of -1.  Answer	Mark
2(c)	AO1 1 mark	
	Award 1 mark for the correct type of price elasticity of demand (PED)	
	Unitary	(1)

Question number	Calculate, to two decimal places, the <b>price elasticity of supply (PES)</b> for shoes. You are advised to show your working. <b>Answer</b>	Mark
2(d)	AO2 2 marks	
	Award 1 mark for showing correct calculation -2.7%/-1.9% (1)	
	Award 1 mark for correct PES 1.42 (1)	
	Award 2 marks if PES is correctly calculated as 1.42, even if no calculations are shown	
	Do not award marks for a formula	(2)

Question number	Define the term substitute.  Answer	Mark
2(e)	AO1 1 mark	
	Award 1 mark for a correct definition	
	An alternative bought/produced in place of something else	
	Accept any other appropriate response	(1)

Question number	Describe <b>one</b> reason why a firm might stay small. <b>Answer</b>	Mark		
2(f)	AO1 2 marks			
	Award 1 mark for reference to the reason and 1 mark for development of the reason			
	<ul> <li>It may already be making enough money (1) to satisfy the needs of the owner (1)</li> </ul>			
	<ul> <li>The size of the market may be small (1) which means expansion is difficult (1)</li> </ul>			
	Accept any other appropriate response	(2)		

Question number	Explain <b>one</b> advantage of positive reviews for the owners of food stalls in Taba. <b>Answer</b>	Mark
2(g)	Award 1 mark for identifying a relevant advantage Award 1 mark for developing the advantage Award 1 mark for the advantage being in context  • Stalls offering quality food will gain more customers (1) because customers will be attracted by the positive reviews (1) instead of buying from competitors (1)  • Demand will increase for food from these stalls (1) leading to an increase in revenue (1) which will increase profit for the food stall owners (1)	
	Accept any other appropriate response	(3)

Question number	With reference to the data above and your knowledge of economics, assess whether a monopoly such as PKP is likely to benefit consumers.  Indicative content	
2(h)	AO2 (3 marks)/AO3 (3 marks)/AO4 (3 marks)	
	AO2 and AO3	
	<ul> <li>A monopoly is a market structure with one dominant seller in the market</li> <li>PKP is the main rail carrier for passenger and freight services in Poland, making it a monopoly</li> <li>Due to its dominance of the rail network in Poland, PKP may be able to take advantage of economies of scale</li> <li>This means that the firm may have low (long-run) average costs as a result of purchasing or technical economies of scale</li> <li>Therefore, it is possible that PKP could decide to pass the lower costs on to its passengers in the form of lower prices</li> <li>PKP may also be more efficient because it is not duplicating resources, such as the railway tracks, used by competitors</li> <li>This may have helped PKP to meet the transport needs of the state; one of its aims</li> <li>PKP may also be able to innovate due to its lower (long-run) average costs, meaning it may be able to provide a high-quality service on its trains</li> </ul>	
	AO4	
	<ul> <li>However, as it has few competitors, rail passengers and those transporting freight have little choice but to use PKP's service</li> <li>This means PKP can be a price maker for its train services, which is not in the interest of its consumers</li> <li>There is restricted choice in the market, such as which routes a passenger can take. This is because there is only one main supplier</li> <li>PKP may be inefficient because it does not need to keep its costs low in order to compete with limited competition</li> <li>It may be that PKP does not have any incentive to spend money on product innovation and some areas may not have access to train travel</li> </ul>	

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul> <li>Demonstrates basic knowledge and understanding by developing relevant points. Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> <li>Only offers one viewpoint, meaning there is an unbalanced and incomplete evaluation, showing limited understanding and awareness (AO4).</li> </ul>
Level 2	4–6	<ul> <li>Demonstrates partial knowledge and understanding by developing relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> <li>Offers more than one viewpoint but the argument may lack balance, leading to an evaluation that may not demonstrate full understanding and awareness (AO4).</li> </ul>
Level 3	7–9	<ul> <li>Demonstrates clear knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Interpretation of economic information will be excellent, with a thorough analysis of issues (AO3).</li> <li>Offers more than one viewpoint. The argument is well balanced and coherent, leading to an evaluation that demonstrates full understanding and awareness (AO4).</li> </ul>

Question number	Income elasticity of demand (YED) for a product is -0.43 and the price elasticity of demand (PED) for the same product is -0.27.  The data above shows that the product is Answer	Mark
3(a)	AO1 1 mark	
	The only correct answer is:	
	A an inferior good and demand is price inelastic	
	B is not correct because PED is less than -1, not greater than -1	
	C is not correct because YED is negative	
	D is not correct because the PED would need to be greater than -1	(1)

Question number	The formula for social benefits is  Answer	Mark
3(b)	AO1 1 mark	
	The only correct answer is:	
	C private benefits + external benefits	
	A is not correct because it does not include any third-party effects	
	B is not correct because it includes costs	
	D is not correct because this is not a formula used to calculate social	
	benefits	(1)

Question number	On the diagram below, draw the effects of a decrease in the retirement age on the labour market in a country. Label the new curve, the new equilibrium wage rate and the new equilibrium quantity of workers employed.  Answer	Mark
3(c)	Award 1 mark for leftward shift of labour supply, labelled Award 1 mark for higher equilibrium wage rate, labelled Award 1 mark for lower equilibrium quantity of workers employed, labelled  Wage rate  DL SL1 SL Q1 Qe  Overtity of workers employed	
	Quantity of workers employed	(3)

Question number	With reference to the data above and your knowledge of economics, analyse why some people may ignore the negative impacts of spending a lot of time using a mobile phone.  Indicative content
3(d)	AO2 (3 marks)/AO3 (3 marks)
	AO2 and AO3
	<ul> <li>Consumers are not always good at calculating what is or is not good for them</li> <li>Therefore, the mass of information and facilities available on a mobile phone can be difficult to resist</li> </ul>
	This is also true due to the habit many people have developed to use their mobile phone for so many things in daily life
	<ul> <li>Developing such a habit of reaching for the phone for a wide variety of reasons can reduce a person's ability to make rational decisions</li> </ul>
	<ul> <li>When so many other people spend so much time on their phone, this behaviour can influence others</li> </ul>
	<ul> <li>Therefore, making it difficult to maximise their benefit regarding use of mobile phones</li> </ul>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul> <li>Demonstrates basic knowledge and understanding by developing relevant points. Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> </ul>
Level 2	3–4	<ul> <li>Demonstrates partial knowledge and understanding by developing relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> </ul>
Level 3	5–6	<ul> <li>Demonstrates clear knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Interpretation of economic information will be excellent, with a thorough analysis of issues (AO3).</li> </ul>

Question number	With reference to the data above and your knowledge of economics, assess the role of the secondary sector in an economy.  Indicative content		
3(e)	AO2 (3 marks)/AO3 (3 marks)/AO4 (3 marks)		
	AO2 and AO3		
	The secondary sector is the production of goods by converting raw materials from the primary sector		
	Manufacturing is an example of a secondary sector industry		
	<ul> <li>The income and tax revenue provided from the secondary sector can help fund services in the tertiary sector, therefore giving a reason why the economy might be reliant on the secondary sector</li> </ul>		
	<ul> <li>In addition, many services rely on production from the secondary sector to be able to provide their services, e. g. transport services (tertiary) rely on the car production (secondary), sales services (tertiary) rely on the production of finished goods (secondary) to sell</li> </ul>		
	<ul> <li>Without the production of vehicles, computers and food processing in the secondary sector, the tertiary sector would not be able to deliver services reliant on transport, monitor sales using computers/technology or serve food in restaurants</li> </ul>		
	AO4		
	<ul> <li>However, the economy focuses on the provision of a range of services in the tertiary sector, including insurance and banking, as well as health care and education</li> </ul>		
	<ul> <li>Revenue earned in the tertiary sector could be used by governments to fund manufacturing of equipment, such as that used in defence</li> </ul>		
	<ul> <li>Therefore, the tertiary sector may play a more important role in an economy</li> <li>Tertiary sector services need the expertise and skills of professionals such as accountants, doctors and teachers</li> </ul>		
	Therefore, the tertiary sector relies on elements such as skills and qualifications as well as on the secondary sector		
	The economy relies on the primary sector as well, for the extraction of raw materials to use during production (in the secondary sector)		

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul> <li>Demonstrates basic knowledge and understanding by developing relevant points. Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> <li>Only offers one viewpoint, meaning there is an unbalanced and incomplete evaluation, showing limited understanding and awareness (AO4).</li> </ul>
Level 2	4-6	<ul> <li>Demonstrates partial knowledge and understanding by developing relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> <li>Offers more than one viewpoint but the argument may lack balance, leading to an evaluation that may not demonstrate full understanding and awareness (AO4).</li> </ul>
Level 3	7–9	<ul> <li>Demonstrates clear knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Interpretation of economic information will be excellent, with a thorough analysis of issues (AO3).</li> <li>Offers more than one viewpoint. The argument is well balanced and coherent, leading to an evaluation that demonstrates full understanding and awareness (AO4).</li> </ul>

Question number	Calculate the <b>excess demand</b> for tickets if the quantity supplied for all three events totals 60,000. You are advised to show your working. <b>Answer</b>	Mark
4(a)	AO2 2 marks	
	Award 1 mark for showing correct calculation	
	(22,200 + 21,000 + 20,250) - 60,000 <b>(1)</b>	
	Award 1 mark for correct excess demand	
	3,450 <b>(1)</b>	
	Award 2 marks if excess demand is correctly calculated as 3,450 even if no calculations are shown	
	Do not award marks for a formula	(2)

Question number	With reference to the data above and your knowledge of economics, analyse why the free rider problem has led to the Zambian Government providing the defence force.  Indicative content	
4(b)	AO2 (3 marks)/AO3 (3 marks)	
	AO2 and AO3	
	<ul> <li>The free rider problem is when a person enjoys the benefit of a good without paying for it</li> <li>The Zambian defence force is an example of a public good as it is provided by the government in Zambia</li> <li>It is non-excludable, meaning no one can be excluded from benefitting from the defence even if they have not paid for its provision</li> <li>Having the defence force increases the standard of living for citizens of Zambia but if left to the private sector to provide, individuals would not pay for it</li> <li>One person benefitting from country's defence will not reduce the amount available for others; it has non-rivalry</li> <li>Therefore, the free rider problem leads to the need for the provision of defence by the Zambian Government</li> </ul>	

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul> <li>Demonstrates basic knowledge and understanding by developing relevant points. Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> </ul>
Level 2	3–4	<ul> <li>Demonstrates partial knowledge and understanding by developing relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> </ul>
Level 3	5–6	<ul> <li>Demonstrates clear knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Interpretation of economic information will be excellent, with a thorough analysis of issues (AO3).</li> </ul>

Question	With reference to the data above and your knowledge of economics, evaluate the		
number	effectiveness of government regulations in dealing with externalities such as air pollution in Greater Manchester.		
	Indicative content		
4(c)	AO2 (4 marks)/AO3 (4 marks)/AO4 (4 marks)		
	AO2 and AO3		
	<ul> <li>Government regulation is put in place to reduce the external costs of production and consumption</li> </ul>		
	<ul> <li>Drivers of polluting vehicles are less likely to drive in the region, or will need to replace their vehicles when faced with a daily charge of between £7.50 and £60.00</li> </ul>		
	<ul> <li>This is likely to reduce pollution and the negative impact on the environment, therefore reducing negative externalities</li> </ul>		
	<ul> <li>The scheme would also raise money for the government, meaning more funding could be available for schemes to benefit the environment</li> <li>The 800km² covered by the CAZ is a very large area, meaning the 1,000+ annual deaths will hopefully be reduced as a result of the scheme</li> <li>More awareness of the problems caused by vehicle emissions could be gained through adoption of the scheme, leading to better prevention of pollution in</li> </ul>		
	the future AO4		
	<ul> <li>However, as the proposal will affect many small businesses in the area, their costs will increase considerably</li> </ul>		
	<ul> <li>This means that these firms may not be able to afford the tax, such as the ice- cream firm expects costs to rise by £29 000 a year, or to replace its vehicles and may need to pass the charges on to customers</li> </ul>		
	<ul> <li>Therefore, some firms may lose business if their customers are unwilling/unable to pay the higher prices</li> </ul>		
	This could lead to firms needing to close down, potentially causing prices to rise for customers in the area anyway, if there is limited competition		
	It may depend on the value placed on clean air by firms driving the vehicles and by customers, as to whether higher prices will be paid		
	<ul> <li>It may also depend on the profits/income of firms/customers, as to the impact of the charges and therefore whether negative externalities will actually be reduced</li> </ul>		
	<ul> <li>There may be better ways to reduce air pollution, such as encouraging people to walk short distances rather than drive</li> </ul>		

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul> <li>Demonstrates isolated elements of relevant knowledge and understanding; may lack development of relevant points.         Limited application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will lack selectivity and organisation.         Chain of reasoning may be attempted. Interpretation of economic information will be limited, with a lack of analysis of issues (AO3).</li> <li>Only offers one viewpoint, meaning there is an unbalanced and incomplete evaluation, showing limited understanding and awareness. A judgement or conclusion is unlikely to be attempted (AO4).</li> </ul>
Level 2	5-8	<ul> <li>Demonstrates partial selectivity and some accurate knowledge and understanding by developing some relevant points. Partial application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate some selectivity and organisation. Chain of reasoning will be present but may be limited. Interpretation of economic information will be good, with some analysis of issues (AO3).</li> <li>Offers more than one viewpoint but the argument may lack balance, leading to an evaluation that may not demonstrate full understanding and awareness. A judgement or conclusion is attempted, but may not be fully supported (AO4).</li> </ul>
Level 3	9–12	<ul> <li>Demonstrates specific and accurate knowledge and understanding by developing relevant points. Appropriate application of economic terms, concepts, theories and calculations (AO2).</li> <li>Information presented will demonstrate excellent selectivity and organisation. Chain of reasoning will be coherent and logical. Interpretation of economic information will be excellent with a thorough analysis of issues (AO3).</li> <li>Offers more than one viewpoint. The argument is well balanced and coherent, leading to an evaluation that demonstrates full understanding and awareness. A supported judgement or conclusion is present (AO4).</li> </ul>