OXFORDAQA

INTERNATIONAL QUALIFICATIONS

INTERNATIONAL A-LEVEL

ECONOMICS

EC03

Unit 3 The Economics of Business Behaviour and the Distribution of Income

Mark scheme

January 2024

Version: 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from www.oxfordaqa.com

International A-level Economics mark scheme

How to mark

Aims

When you are marking your allocation of scripts your main aims should be to:
- recognise and identify the achievements of students
- place students in the appropriate mark band and in the appropriate part of that mark band (high, low, middle)
- record your judgements with brief notes, annotations and comments that are relevant to the mark scheme and make it clear to other examiners how you have arrived at the numerical mark awarded
- put into a rank order the achievements of students (not to grade them – that is done later using the rank order that your marking has produced)
- ensure comparability of assessment for all students, regardless of question or examiner.

Approach

It is important to be **open-minded** and **positive** when marking scripts.

The specification recognises the variety of experiences and knowledge that students will have. It encourages them to study Economics in a way that is relevant to them. The questions have been designed to give them opportunities to discuss what they have found out about Economics. It is important to assess the quality of **what the student offers**.

Assessment Objectives

This component requires students to:

AO1	Demonstrate knowledge of terms/concepts and theories/models to show an understanding of the behaviour of economic agents and how they are affected by and respond to economic issues.
AO2	Apply knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues.
AO3	Analyse issues within economics, showing an understanding of their impact on economic agents.
AO4	Evaluate economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues.

The marking grids

The marking grids cover all the Assessment Objectives indicated as being assessed in each question, followed by indicative content for individual tasks. These have been designed to allow assessment of the range of knowledge, understanding and skills that the specification demands.

The indicative content gives examples of the kind of things students might cover in their responses. They are neither exhaustive nor required – they are simply indicative of what could appear. Other valid content presented in student responses should always be credited.

Using the grids

These levels of response mark schemes are broken down into levels, each of which has descriptors. The descriptors for the level show the performance characteristics of the level. There is the same number of marks in each level. The number of marks per level varies depending upon the total number of marks allocated to the question.

Having familiarised yourself with the descriptors and indicative content, read through the answer and annotate it to identify the qualities that are being looked for and that it shows. You can now check the levels and award a mark.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptors for that level. The descriptors for the level indicate the different qualities that might be seen in the student's answer for that level.

When assigning a level, you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best-fit approach for defining the level and then use the variability of the response to help decide the mark within the level; ie if the response fulfils most but not all of level 3 with a small amount of level 4 material, it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark.

It is often best to start in the middle of the level's mark range and then check and adjust.

The exemplar materials used during standardisation should be referred to. There will be an answer in the standardising materials that will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is of the same standard, better or worse. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

An answer that contains nothing of relevance to the question must be awarded no marks.

Examiners are required to assign each of the students' responses to the most appropriate level according to its overall quality, then allocate a single mark within the level. When deciding upon a mark in a level, examiners should bear in mind the relative weightings of the Assessment Objectives and be careful not to over/under-credit a particular skill. For example, in question 13 more weight should be given to AO3 than to AO1 and AO2. This will be exemplified and reinforced as part of examiner training.
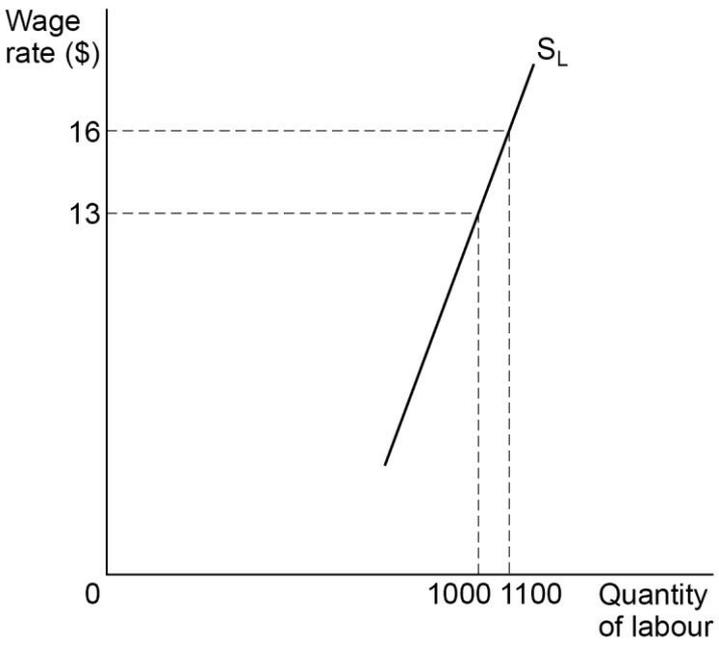
Annotating scripts

Annotating scripts will help you with making accurate judgements and it will help any subsequent markers to identify how you are thinking. Please do not write negative comments about students' work; this is unprofessional and it impedes a positive marking approach.

Section A   **Total for this section: 10 marks**

Question	Part	Marking guidance	Total marks
01		Relative poverty is best defined as where Answer: **D** (an individual receives less than a certain percentage of a country's average income.)	1 AO1 = 1

Question	Part	Marking guidance	Total marks
02		 Which one of the following is most likely to have caused the increase in the supply of labour to the industry? Answer: **A** (Demand for the industry's products has increased)	1 AO2 = 1

Question	Part	Marking guidance	Total marks
03			1 AO2 = 1

Number of biscuits consumed	Average utility (units)
5	23
6	20
7	17
8	14

If Esteban wishes to maximise the total utility he obtains from eating biscuits, how many biscuits should he eat that day?

Answer: **B** (6)

Question	Part	Marking guidance	Total marks
04			1 AO3 = 1

If the monopolist charges a price of $90, what is the deadweight loss?

Answer: **A** ($37 500)

Question	Part	Marking guidance	Total marks
05		In which one of the following market structures is non-price competition most likely to be a common feature? Answer: **A** (Monopolistic competition)	**1** **AO1 = 1**

Question	Part	Marking guidance	Total marks
06		Which one of the following is the most likely reason why the school is able to pay its female and male teachers a different wage for doing the same job? Answer: **C** (There are no other schools in the area)	**1** **AO2 = 1**

Question	Part	Marking guidance	Total marks
07		Which one of the following values of the Gini coefficient shows the highest possible level of income inequality?	**1** **AO1 = 1**

	Gini coefficient
A	−1.0
B	0.0
C	1.0
D	2.0

Answer: **C** (1.0)

Question	Part	Marking guidance	Total marks
08		Which diagram shows a firm that has become X-efficient as a result of moving from point M to point N? Answer: **D** (Firm D)	1 AO2 = 1

Question	Part	Marking guidance	Total marks
09		Which one of the following is the most likely reason for vertical integration between firms? Answer: **B** (To gain more control over supplies of materials)	1 AO1 = 1

Question	Part	Marking guidance	Total marks
10			1 AO2 = 1

Number of workers	Total product
9	421
10	512
11	607
12	700
13	787

Diminishing marginal returns begin to occur when the firm employs

Answer: **C** (the 12th worker.)

Section B   **Total for this section: 10 marks**

Question	Part	Marking guidance	Total marks
11	**1**	Define 'normal profit'.	**2**
		A full and precise definition is given (2 marks)	**AO1 = 2**
		Examples of acceptable definitions worth 2 marks:	
		• the minimum amount of profit that will persuade the owner to remain in a market • when total revenue is just sufficient to cover total costs (or AR = AC).	
		The substantive content of the definition is correct, but there may be some imprecision or inaccuracy (1 mark)	
		Examples of definitions worth 1 mark:	
		• when revenue equals cost • when a firm breaks even • the profit earned by a firm in perfect competition in the long run.	

Question	Part	Marking guidance	Total marks
11	2		2 AO1 = 1 AO2 = 1

Quantity of holidays sold	Average revenue ($)	Marginal revenue ($)	Average variable cost ($)
4	16 000		
5	15 000		
6		9 000	5 500

Calculate the marginal revenue Cem receives from selling the fifth holiday.

Calculation:

Total revenue from 4 units = $16 000 × 4 = $64 000
Total revenue from 5 units = $15 000 × 5 = $75 000

Marginal revenue of fifth unit = 75 000 – 64 000 = $11 000

Response	Max 2 marks
For the correct answer: $11 000 (with or without working shown)	**2 marks**
For the correct answer but with missing/incorrect units: eg 11 000 **OR** For the correct calculation of the total revenue from selling either 4 or 5 units: $64 000 or $75 000 (with or without correct units) **OR** For the correct method but with the wrong answer	**1 mark**

Question	Part	Marking guidance	Total marks
11	3	Use **Table 4** to calculate the amount of profit Cem will earn from selling six holidays if his fixed costs are $30 000 each month. Calculation: Total revenue = ($15 000 × 5) + $9 000 = $84 000 Total cost = ($5 500 × 6) + $30 000 = $63 000 Profit = $84 000 – $63 000 = $21 000	**2** **AO1 = 1** **AO2 = 1**

Response	Max 2 marks
For the correct answer: $21 000 (with or without working shown)	**2 marks**
For the correct answer but missing/incorrect units: eg 21 000 **OR** For the correct calculation of the total revenue from six sales: $84 000 (with or without correct units) **OR** For the correct calculation of the total costs from six sales: $63 000 (with or without correct units) **OR** For the correct method but with the wrong answer	**1 mark**

Question	Part	Marking guidance	Total marks
11	4	Explain, using **Figure 3**, why the kinked demand curve model suggests that prices are likely to be stable in an oligopolistic market.	4 AO1 = 2 AO2 = 2

Level	Marks	Descriptor
2	3–4	• Shows good knowledge and understanding of why the kinked demand curve model suggests that prices are likely to be stable in an oligopolistic market. • Includes use of the diagram that will, at the top of this level, be accurate and used appropriately.
1	1–2	• Shows some limited knowledge and understanding of why the kinked demand curve model suggests that prices are likely to be stable in an oligopolistic market. • May include use of the diagram but the use of the diagram is inaccurate or inappropriate in some respects.
	0	No creditworthy material

Indicative content:

It is not expected that students will add anything to the diagram but if they do so, and it is helpful, they should be rewarded.

An example of an acceptable explanation:

The kinked demand curve suggests that firms in an oligopoly have no incentive to change their prices because they expect that a price change will lead to a fall in total revenue. A reduction in price is likely to be copied by other firms because otherwise, their sales will fall significantly. Therefore, a reduction in price is likely to lead to a proportionately smaller increase in quantity demanded (as shown on the inelastic portion of the AR curve between Q_e and Q_1) and total revenue will decrease. Similarly, firms know from experience that competitors are unlikely to follow a price rise, because if they don't follow the price rise, they will increase their market share. This means that the firm raising its price would face significantly reduced demand (Q_e to Q_2 where the demand curve is elastic for price increases) also resulting in lower total revenue. Therefore, prices in oligopolistic markets tend to be stable because any change in price, either up or down, is likely to lead to a fall in total revenue.
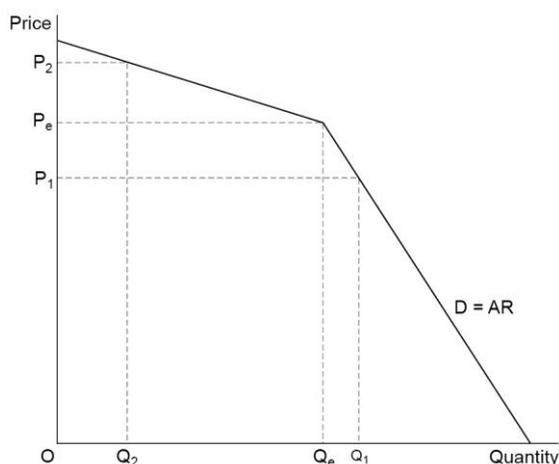
Credit valid alternative content.

MAXIMUM FOR QUESTION 11: 10 MARKS

Section C   **Total for this section: 45 marks**

Question	Part	Marking guidance	Total marks
12	**1**	**Extract A** shows an index of average prices for Australian domestic air travel and the average annual price of oil, from which aircraft fuel is produced. Explain how the price of oil may affect the price of air travel.	**4** **AO1 = 1** **AO2 = 1** **AO3 = 2**

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question.

Level	Marks	Descriptor
2	3–4	• Shows sound knowledge and understanding of relevant economic terminology, concepts and principles. • Includes reasonable application of relevant economic principles to support the response. • Includes well-focused analysis with a clear, logical chain of reasoning.
1	1–2	• Shows some limited knowledge and understanding of relevant economic terminology, concepts and principles. • May include some application of relevant economic principles to the question. • May include some attempted analysis but the analysis is not adequately developed and/or may be confused.
	0	No creditworthy material

Indicative content:

• recognition that oil is in derived demand for air travel
• changing oil prices will therefore have a significant impact on the cost of fuel
• explanation that the cost of fuel is an important determinant of airlines' costs of production
• explanation of the relationship between businesses' costs and the prices they charge
• oil as a normal good with composite demand
• recognition that oil prices are determined by market forces and demand increased as a result of the lifting of Covid restrictions, which raised its price
• demand for oil may be relatively price inelastic due to a lack of substitutes available for use in the manufacture of aircraft fuel
• use of demand and supply analysis.

Note: Some students may support their answer with a diagram, but this is not needed for full marks.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
12	**2**	To what extent do the data suggest that the price of oil affected the price of domestic air travel in Australia between 2015 and 2022? Use the data in **Extract A** to support your answer.	**4** **AO1 = 1** **AO2 = 1** **AO4 = 2**

Examiners are reminded that AO1, AO2 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question.

Level	Marks	Descriptor
2	3–4	• Includes sound evidence that indicates the extent to which the price of oil affected the price of domestic air travel in Australia between 2015 and 2022. • Includes a supported judgement concerning the extent to which the price of oil affected the price of domestic air travel in Australia between 2015 and 2022.
1	1–2	• Includes some limited evidence that indicates the extent to which the price of oil affected the price of domestic air travel in Australia between 2015 and 2022. • May attempt a judgement concerning the extent to which the price of oil affected the price of domestic air travel in Australia between 2015 and 2022 but this is not adequately supported by the data.
	0	No creditworthy material

Indicative content:

- there are four years when the price of air travel moved in the same direction as oil prices, eg oil prices rose from $63.14 in 2021 to $87.95 (39.3%) in 2022 while the index of average air travel prices from 70.9 to 84.4 (19.0%) (also the period between 2016-2019)
- there are three years when the price of air travel moved in the opposite direction to oil prices, eg oil prices fell from $51.84 to $45.54 (12.2%) from 2015 to 2016 but the index of average air travel prices rose from 79.6 to 80.0 (0.5%) (also the period between 2019-2021)
- over the entire period shown, the index of average air travel prices rose by 6.0% while oil prices rose by 69.7%
- there may be evidence of a delay between changes in oil prices and in the price of air travel, eg the sharp fall in average oil prices from 2019 to 2020 was not reflected in the index of average air travel prices until a year later. This could imply airlines buy their fuel in advance
- oil prices were more volatile than airfares, with 2016-2017 being the only annual change where the index of average air travel prices changed by a greater proportion than average oil prices, this may indicate that other factors also play an important role in influencing the prices charged by airlines
- aircraft fuel is just one type of cost faced by airlines and so many other variables will also influence their cost of production and, therefore, the prices they charge
- factors not related to costs may also influence prices in the airline industry such as the market structure, level of competition, demand or pricing strategy chosen at a particular time
- the exchange rate between the Australian and US dollars will vary over the period and so make any link between oil prices and ticket prices less clear
- the likely conclusion from the evidence provided is that, on balance, there is no clear evidence of the expected relationship between the average price of oil and the price of domestic air travel in Australia over the period shown. However, alternative conclusions should be rewarded if suitably supported.

Credit valid alternative content.

MAXIMUM FOR QUESTION 12: 8 MARKS

Question	Part	Marking guidance	Total marks
13		**Extract B** (lines 8–9) states: 'During these two years, wage rates stayed the same, but began to rise significantly in 2022.' Explain possible reasons why wage rates in the Australian airline industry may have risen in 2022.	**12** **AO1 = 3** **AO2 = 3** **AO3 = 6**

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO3 than AO1 and AO2.

Level	Marks	Descriptor
3	9–12	• Is well organised and develops one or more of the key issues that are relevant to the question. • Shows sound knowledge and understanding of relevant economic terminology, concepts and principles. • Includes good application of relevant economic principles and/or good use of data to support the response. • Includes well-focused analysis with a clear, logical chain of reasoning. • May include a relevant diagram that is accurate and used appropriately to support their explanation.
2	5–8	• Includes one or more issues that are relevant to the question. • Shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present. • Includes reasonable application of relevant economic principles and/or data to the question. • Includes some reasonable analysis but it might not be adequately developed and may be confused in places. • May include a relevant diagram to support their explanation.
1	1–4	• Is very brief and/or lacks coherence. • Shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely. • Demonstrates very limited ability to apply relevant economic principles and/or data to the question. • May include some very limited analysis but the analysis lacks focus and/or becomes confused. • May include a diagram but the diagram is likely to be inaccurate in some respects or is inappropriate.
	0	No creditworthy material

Indicative content:

- meaning of wage rates
- demand for labour in the industry is derived from demand for air travel
- explanation of MRP/MPP theory and application to demand for labour in the airline context
- wage rates are likely to increase if there is an increase in demand and/or a decrease in supply of labour
- possible causes of increased demand for labour:
  - demand for air travel has increased as a result of the lifting of lockdown restrictions
  - new market entrants and expansion of incumbents in 2022
  - increased international competition for labour in the airline industry
  - airlines may need to increase overall staffing levels to compensate for Covid-related staff absences and related lower labour efficiency or requirements for overtime may necessitate higher rates of pay
- possible causes of decreased supply of labour:
  - other countries reopening more quickly after the pandemic and Australian staff leaving the domestic industry to work for them
  - staff that lost jobs during 2020/2021 finding employment in other industries
  - non-availability of staff due to Covid measures
  - trade union actions
- wage rates did not increase for two years leading to pressure for higher wage rates
- inflation or inflationary expectations in the wider economy fuelling demand for higher wage rates
- the significance of elasticities of the demand and supply of labour eg:
  - the necessity for qualified staff to operate planes and airports
  - a lack of opportunities for capital-labour substitution
  - degree of unionisation within the industry and relative strength of bargaining positions
  - the nature of Australian geography meaning that demand for domestic air travel is highly price inelastic.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
14		**Extract C** (lines 1–2) states: 'The Australian airline industry is dominated by one large firm, Qantas Group, which used to be state owned. In 2022, Qantas had a market share of about 65%.' Assess whether consumers are likely to benefit from the market structure of Australia's airline industry.	**25** **AO1 = 4** **AO2 = 3** **AO3 = 9** **AO4 = 9**

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.
4	16–20	**Sound, focused analysis and some supported evaluation that:** • is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.
3	11–15	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.
2	6–10	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.
1	1–5	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which is, at best, very weak • includes attempted analysis which is weak and unsupported.
	0	No creditworthy material

Indicative content:

- meaning of market structure
- explanation that the market is highly concentrated and Qantas (and to a lesser extent Virgin Australia) may have a high degree of monopoly power
- benefits to consumers from the market structure within the Australian airline industry may include:
  - more innovation resulting in faster journey times
  - greater levels of research and development leading to useful inventions providing enhanced safety, shorter queues, fewer delays or less environmental impact
  - greater investment through retained profits generating improvements in customer service, comfort of journeys etc.
- the market structure may have negative impacts on consumers such as:
  - exploitation through higher prices
  - restricted choice of airlines
  - reduced availability of flights
- markets with significant degrees of monopoly power may be productively or X-inefficient and the impact of this on consumers
- analysis of the potential benefits of dynamic efficiency to consumers, including lower airfares, safer journeys and improved in-flight services such as Wi-Fi connectivity
- analysis of the potential for economies of scale in relation to buying new aircraft and whether consumers will benefit eg through reduced ticket prices
- the likelihood of price discrimination in the airline industry and analysis and evaluation of its potential impacts on different consumers
- discussion of the potential for creative destruction if incumbents use their monopoly power to exploit consumers and generate abnormal profits
- analysis and evaluation of the extent to which the market is contestable, given recent market entries and the potential for international firms to compete with the dominant domestic firms
- evaluation of whether Qantas' privatisation may have affected its efficiency and objectives in relation to passengers
- evaluation of the extent to which monopoly power in the industry is derived from or dependent upon product differentiation and how this impacts consumers
- the role of regulators and competition policy in protecting the interests of consumers from dominant firms within the airline industry
- an overall assessment of whether consumers are likely to benefit from the market structure of Australia's airline industry.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Credit valid alternative content.

Section D   **Total for this section: 25 marks**

Question	Part	Marking guidance	Total marks
15		A large firm operating in a number of countries is bought by a very wealthy individual. They become both its biggest shareholder and its Chief Executive, the person responsible for managing the company. This is unusual for such a large firm. The new owner wants the firm to make as much profit as possible. Discuss whether large firms are more likely to aim to maximise profits than small firms.	**25** **AO1 = 4** **AO2 = 3** **AO3 = 9** **AO4 = 9**

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.
4	16–20	**Sound, focused analysis and some supported evaluation that:** • is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.
3	11–15	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.
2	6–10	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.

1	1–5	**A very weak response that:**
		• includes little relevant knowledge and understanding of economic terminology, concepts and principles
		• includes application to the given context which is, at best, very weak
		• includes attempted analysis which is weak and unsupported.
	0	No creditworthy material

Indicative content:

- consideration of how to define a 'small' or 'large' firm
- explanation of profit maximisation
- reasons firms may wish to maximise/make a profit
- explanation of alternative objectives for small or large firms (survival, growth, quality, ethical behaviour, sales or revenue maximisation etc.)
- analysis of the potential interaction between these alternative objectives and profit maximisation and whether it is more or less likely to affect small or large firms
- the different features of small or large firms and their relevance to the choice of objectives
- analysis of the relationship between the size of the firm and the divorce of ownership from control
- analysis of the role of profit in the growth of firms from small to large (or vice versa)
- consideration of the importance of the personal objectives of the owners
- analysis of how and why (profit) satisficing may take place in organisations of different sizes
- evaluation of whether performance-related executive pay or government regulation may affect the extent of satisficing behaviour
- consideration of the degree of influence of different stakeholders upon the objectives of small or large firms
- discussion of alternative influences on the objectives of firms and whether these are more or less likely to influence a small or large firm:
  - form of ownership, including state-owned enterprises
  - market structure within an industry
  - social, political or regulatory environment in a country
  - activity of pressure groups
- the impact of issues generally associated with large companies on their objectives (eg activist shareholders, employee ownership etc.)
- evaluation of whether and why large firms may be less likely to pursue profit maximisation in the short rather than the long run
- consideration of whether the traditional assumptions about profit maximisation are still relevant today regardless of a firm's size
- knowledge of different situations or examples where firms have or have not aimed to maximise profits
- an overall assessment of whether large firms are more likely to aim to maximise profits than small firms.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
16		Between 2011 and 2019, Brazil's Gini coefficient showed high, and rising, income inequality and its real GDP per capita fell from $8935 to $8592. During the same time, El Salvador's Gini coefficient showed that the distribution of income became more equal and the country's real GDP per capita rose from $3488 to $4105. Assess the likely costs and benefits of having a more unequal distribution of income.	**25** **AO1 = 4** **AO2 = 3** **AO3 = 9** **AO4 = 9**

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.
4	16–20	**Sound, focused analysis and some supported evaluation that:** • is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.
3	11–15	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.
2	6–10	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.

1	1–5	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which is, at best, very weak • includes attempted analysis which is weak and unsupported.
	0	No creditworthy material

Indicative content:

- explanation of an unequal distribution of income and how it can be measured
- income inequality as a cause, effect or potential solution to market failure
- analysis of the likely benefits of a more unequal distribution of income could include:
    - incentive effects on labour and entrepreneurship
    - the effects of increased incomes for certain individuals or groups on other groups (trickle-down effects)
    - increased reward for investment
    - subsequent impacts on productivity and growth
    - the use of accumulated incomes for job creation
    - high incomes as a source of labour market information about which skills are most relevant to a particular economy
    - higher levels of direct tax revenues where the system is progressive
- analysis of the costs of a more unequal distribution of income could include:
    - poverty and associated impacts such as ill health and lack of access to merit goods
    - reduced levels of economic activity where very high levels of income are concentrated in small sectors of society
    - social problems where a very unequal income distribution is perceived to result from a market failure
    - self-perpetuating relationship between income and wealth inequality
    - the opportunity costs to government of supporting those whom the market system leaves with extremely low incomes
    - inefficient resource allocations within an economy when high levels of unearned incomes are available only to the wealthy or when low-income groups feel disenfranchised
    - potential for reduced levels of indirect tax revenues
- discussion of the role of government or other organisations in establishing the 'desired' level of income inequality for an economy
- the extent to which unequal distributions of income resulting from inherited wealth are unfair or undesirable
- evaluation of whether equality of opportunity may be more important than equality of income
- knowledge of specific examples from different economies to support an argument
- analysis and evaluation of the need for some degree of inequality within any market economy
- evaluation of the extent to which a 'very unequal' distribution of income becomes counter-productive
- an overall assessment of the likely costs and benefits of having a more unequal distribution of income.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Credit valid alternative content.

Assessment Objectives Grid

	AO1	AO2	AO3	AO4	Total
Section A					
01	1				**1**
02		1			**1**
03		1			**1**
04			1		**1**
05	1				**1**
06		1			**1**
07	1				**1**
08		1			**1**
09	1				**1**
10		1			**1**
Section B					
11.1	2				**2**
11.2	1	1			**2**
11.3	1	1			**2**
11.4	2	2			**4**
Section C					
12.1	1	1	2		**4**
12.2	1	1		2	**4**
13	3	3	6		**12**
14	4	3	9	9	**25**
Section D					
15 and 16	4	3	9	9	**25**
Unit total	**23**	**20**	**27**	**20**	**90**