

Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2023

Marking Scheme

Economics

Higher Level

Note to teachers and students on the use of published marking schemes

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates' work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates' work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

Future Marking Schemes

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates' work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.

Marking Scheme and Support Notes


In considering the marking scheme and the support notes the following points should be noted:

- The support notes presented are neither exclusive nor complete and further relevant points of information presented by candidates are rewarded on their merits.
- They are not model answers but rather a sample of possible responses.
- The support notes in many cases may contain key phrases which must appear in the candidate's answer in order to merit the assigned marks.
- The detail required in any answer is determined by the context and the manner in which the question is asked and by the number of marks assigned to the answer in the examination paper. Requirements may therefore vary from year to year.
- Words, expressions or phrases must be correctly used in context and not contradicted, and where there is evidence of incorrect use or contradictions the marks may not be awarded.
- Where a candidate provides more valid points than are required in a question, the lowest scoring excess points are discounted by placing square brackets around the excess marks awarded. These excess marks are not included in the total mark for the question, either within the script or on the question grid on the cover, and nor are they included in the cumulative total.

3	2	1	0
Excellent	Good	Fair	Weak
<ul style="list-style-type: none"> • In-depth knowledge • Relates to question • Concise • Logical 	<ul style="list-style-type: none"> • Some knowledge • Limited development 	<ul style="list-style-type: none"> • Vague knowledge 	<ul style="list-style-type: none"> • No knowledge • Repetition of statement

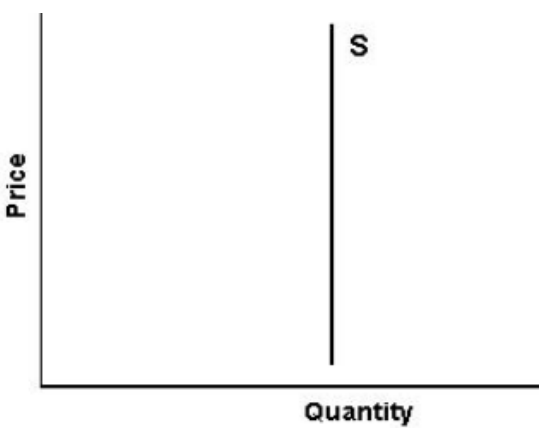
4	3	2	1	0
Excellent	Good	Fair	Poor	Weak
<ul style="list-style-type: none"> • In-depth knowledge • Relates to question • Concise • Logical 	<ul style="list-style-type: none"> • Some knowledge • Limited development 	<ul style="list-style-type: none"> • Vague knowledge 	<ul style="list-style-type: none"> • Confusing or Contradictory knowledge 	<ul style="list-style-type: none"> • No knowledge • Repetition of statement

The table below contains information about annotations used for marking throughout the exam paper.

Annotation	USE	Marks (if applicable)
✓ ₁	Valid information	1
✓ ₂	Valid information	2
✓ ₃	Valid information	3
✓ ₄	Valid information	4
✓ ₅	Valid information	5
✓ ₆	Valid information	6
✓ ₇	Valid information	7
✓ ₈	Valid information	8
✓ ₉	Valid information	9
✓ ₁₀	Valid information	10
✓ ₁₁	Valid information	11
✓	Surplus answer or part of answer	N/A
0	Incorrect answer	0
	Page seen by examiner / information not valid	N/A

SECTION A (100 marks)

Award 1 extra mark for each of the first four correctly answered questions

Q		Possible responses	Marks
1.	(a)	<p>France will host the Rugby World Cup in 2023.</p> <p>Explain, with the aid of a fully labelled diagram (including the axes), the supply curve for tickets for this event.</p> <div style="text-align: center;">  <p>The diagram shows a coordinate system with a vertical axis labeled 'Price' and a horizontal axis labeled 'Quantity'. A vertical line is drawn at a fixed quantity on the horizontal axis, extending upwards. This line is labeled with the letter 'S' at its top end, representing a perfectly inelastic supply curve.</p> </div> <ul style="list-style-type: none"> • Regardless of price, the quantity of seats supplied will be fixed for the stadiums used for the event. • Even if price changes, the venues can only accommodate a certain number of attendees. • It is perfectly inelastic or vertical, reflecting the fact that venues have a fixed capacity. 	3
	(b)	<p>Explain two conditions necessary for price discrimination to occur in the selling of tickets for the Rugby World Cup 2023.</p> <p>Consumer ignorance: The consumer is unaware that the price discrimination is taking place.</p> <p>Consumer indifference: Consumers are aware of the price discrimination but don't care about it.</p> <p>Consumer attitudes: Consumers feel that it is worth paying more for the product rather than go without it.</p> <p>Monopoly power: The firm must have some degree of monopoly power in order to price discriminate otherwise rival firms would undercut prices and the price discrimination would cease.</p> <p>Different price elasticities of demand: In order for (third degree) price discrimination to occur the firm must be able to recognise that different customers are more or less responsive to price changes and therefore price accordingly e.g. pensioners and students would be more price elastic.</p> <p>Market separation: It must be impossible for customers to buy the product in the cheaper market and then resell it in the more expensive market.</p>	2 @ 3

2.	<p>On the 3rd of March, 2022 the price of petrol in Ireland broke the €2 barrier for the first time.</p> <p style="text-align: right;">Adapted from independent.ie</p> <p>(a) Select, using a tick (✓) if petrol is considered to have price elastic demand or price inelastic demand. Explain your answer.</p> <p>Price elastic: <input type="checkbox"/> Price inelastic: <input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> • Petrol has price inelastic demand as if price increases; the percentage increase in price will be greater than the percentage decrease in quantity demanded. • Petrol is a necessity for many motorists and if price rises consumers still need petrol and if price rises demand will fall by a lower proportion/percentage. <p>Answer (b) or (c)</p> <p>(b) Outline two reasons why it is important for retailers to understand the concept of price elasticity of demand.</p> <ul style="list-style-type: none"> • They will know by how much quantity demanded will change if the price of the product is changed. • They will know how to maximise revenue: for goods with inelastic PED firms should increase price / for goods with elastic PED firms should decrease price. • Price discrimination: before a firm considers charging multiple prices it needs to be able to identify consumers with different PEDs. • Impact and incidence of taxation. The firm will decide how much of an indirect tax to pass on to the consumer based upon their PED. <p>(c) OR</p> <p>Outline one advantage and one disadvantage for the Irish economy of the Minister for Finance’s decision not to increase excise duties on petrol in Budget 2023.</p> <p style="text-align: center;">Advantages</p> <ul style="list-style-type: none"> • Cost of Living Crisis: Irish citizens are already struggling to maintain their standard of living due to the constant inflationary pressures throughout 2022. An increase in excise duties would have only further exacerbated this problem. • Doesn’t penalise businesses: any increase in excise duties would have created further increases in costs of production for firms which are already struggling to survive. <p style="text-align: center;">Disadvantages</p> <ul style="list-style-type: none"> • Government revenue: petrol has price inelastic demand and thus increases in excise duties generate large increases in revenue for the Irish government. 	<p>1</p> <p>5</p> <p>2@3</p> <p>2@3</p>
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- | | | |
|--|--|--|
| | <ul style="list-style-type: none">• Environmental damage: Tax increases are a disincentive to consume a good for consumers. Without increasing this disincentive consumers will continue to purchase this environmentally harmful product. | |
|--|--|--|

3. (a) Complete the missing total utility and marginal utility figures in the table below. Show your workings.

Number of units consumed	1	2	3	4
Total Utility in Units/Utils	40	80	115	137
Marginal Utility in Units/Utils	40	40	35	22

Workings:

- $80 - 40 = 40$
- $80 + 35 = 115$
- $137 - 115 = 22$

Answer (b) or (c)

- (b) Based upon the marginal utility figures calculated above, at what point does the law of diminishing marginal utility set in? Explain your answer.

- Answer: on the consumption of the third unit/after the consumption of the second unit.
- Marginal utility declines from 40 to 35 utils.

OR

- (c) Does the formula above obey the Equi-Marginal Principle of consumer behaviour? Explain your answer.

$$\frac{MU_x}{P_x} = \frac{1800}{10} = \frac{MU_y}{P_y} = \frac{3600}{10}$$

- No, because:
- $1800 \div 10 = 180$
- $3600 \div 10 = 360$ therefore the ratio is not the same.

6

6

6

4. (a) The table below shows the output and total costs in a firm.
Complete the missing average cost and marginal cost figures in the table below.

Output (units)	1	2	3	4
Total Cost (€)	55	82	108	152
Average Cost (€)	55	41	36	38
Marginal Cost (€)	N/A	27	26	44

Workings:

- $82 \div 2 = 41$
- $108 - 82 = 26$
- $152 \div 4 = 38$
- $152 - 108 = 44$

Answer (b) or (c)

- (b) To remain in production, in the short run a firm must cover its average total costs. Do you agree or disagree with this statement? Agree Disagree
- Explain your answer.

In the short run a firm must cover its average variable costs while waiting for an increase in price of output / or a reduction in total costs / as it may be making a contribution to its fixed costs.

OR

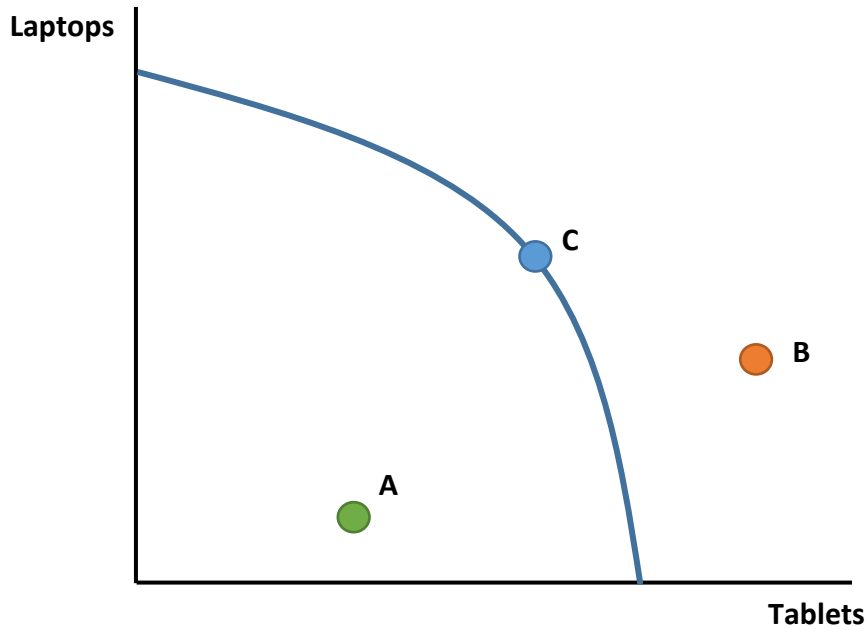
- (c) Explain the relationship between the Marginal Cost Curve and the Average Cost Curve.
- When Marginal Cost is greater than Average Cost: Average Cost is rising.
 - When Marginal Cost is less than Average Cost: Average Cost is falling.
 - When Marginal Cost is equal to Average Cost: Average Cost is at a minimum.

6

6

6

5. (a) The diagram below shows the Production Possibilities Frontier for a digital manufacturing company that produces both laptops and tablet devices.



Identify from the diagram above which option (A, B or C) represents, an efficient, an inefficient, and an impossible production point respectively. Complete the table below.

Choose one letter for each	A, B or C
Efficient Production Point	C
Inefficient Production Point	A
Impossible Production Point	B

(b) Justify each of your choices you made in (a) above.

- Efficient refers to a production point where the firm is making the best possible use of scarce resources. i.e. it is producing as much as it can given their current resources. This can be seen anywhere on the boundary – Point C.
- Inefficient refers to a production point where the firm is wasteful of scarce resources. i.e. it is possible to produce more tablets and laptops given their current resources. This can be seen anywhere inside the boundary – Point A
- Impossible refers to a production point which the firm cannot currently produce given their current scarce resources. In order to produce this level of output they need to increase their factors of production. This can be seen anywhere outside the boundary – Point B.

6

6

6. (a) In each case below, indicate by placing a tick (✓) whether the tax is an example of direct taxation **or** indirect taxation.

Tax	Direct Tax	Indirect Tax
VAT		✓
PAYE	✓	
Customs and Excise Duty		✓

6

(b) Outline three canons/principles of taxation which are achieved through the use of direct taxes.

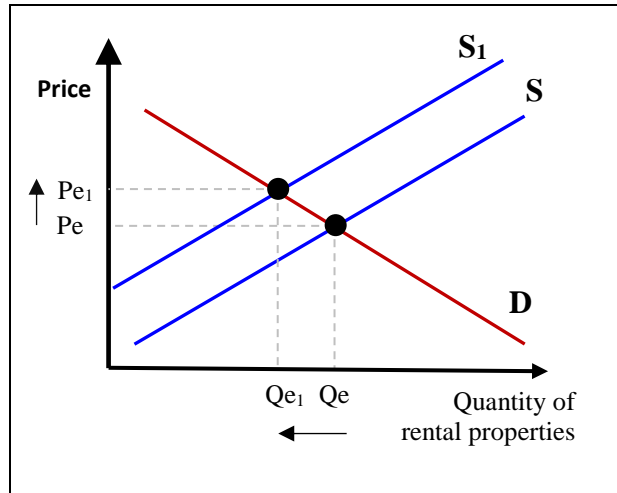
- Certainty: it should be clear and unambiguous to the taxpayer the amount they are required to pay and the reason for doing so.
- Convenience: the tax such be levied at a time and in a manner which is most convenient for the taxpayer to pay.
- Equity: the tax system should operate fairly. An equitable tax system should take a larger amount from those who are more able to pay than others.
- Economy: the cost of tax collection should be far exceeded by the amount of tax which is collected.
- Not act as a disincentive to save/work/invest: no tax should negatively affect those willing to supply their labour / or their ability to save or discourage entrepreneurs from investing.
- Evasion should be impossible: otherwise the tax is not effective in raising revenue.

6

7. (a) Landlords are leaving the Irish housing market in their thousands, blaming excessive taxation, rent control and constantly changing laws.

Adapted from Sunday Business Post

Show on the diagram below, how this development will alter the rental market equilibrium position. Explain your answer.



3

- As landlords leave the market it reduces the supply of properties in the market.
- The supply curve will shift to the left from S_1 to S_2 .
- The equilibrium price will increase from Pe_1 to Pe_2 .

3

(b) The introduction of the vacant property tax in Ireland can be classed as a government intervention.

Outline two reasons why the Irish government introduced this vacant property tax.

6

- Increased government revenue to help with the homelessness/housing crisis.
- Vacant properties represent a market failure: in a market where some consumers are unable to find a home to live in, vacant properties represent a waste of scarce resources.
- More equitable: some vacant properties are holiday homes indicating that they are a second household for the owner. A progressive tax system should take a higher proportion away from owners of greater wealth.
- Increased pressure on the Irish housing market year on year. Exacerbated further by the war in Ukraine.

<p>8.</p>	<p>Eurozone interest rates were increased four times in the last six months of 2022. Adapted from ecb.europa.eu</p> <p>(a) Justify why the European Central Bank (ECB) made this decision.</p> <ul style="list-style-type: none"> The European Central Bank (ECB) made this monetary policy decision to combat the inflationary / cost of living crisis across Europe. <p>(b) Does being a member of the Eurozone affect Ireland’s ability to implement monetary policy in Ireland? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain your answer.</p> <p style="text-align: center;">Yes.</p> <ul style="list-style-type: none"> Ireland doesn’t have sovereignty over its monetary policy anymore. Ireland cannot change its base interest rate - it is set by the ECB. Ireland cannot print more currency without permission from the ECB. Ireland cannot change bank lending regulations independently from ECB control. 	<p>6</p>
<p>9.</p>	<p>China, is the world’s powerhouse in manufacturing goods e.g. clothing. This is seemingly unaffected by the law of diminishing marginal returns. Adapted from hks.harvard.edu</p> <p>(a) Explain the economic concept of the law of diminishing marginal returns.</p> <p>The law of diminishing marginal returns states that as an increasing amounts of a variable factor of production is added to a fixed amount of the other factors of production eventually a point will be reached the addition to total output will start to decline.</p> <p>(b) Harvard Kennedy School suggests that China’s next area of specialisation will not be clothing but rather high-tech exports. Adapted from hks.harvard.edu</p> <p>Outline two cost advantages China’s firms experience through specialisation. (Through specialisation firms can become more efficient in the production of a good meaning more output is produced per worker/machine per hour).</p> <ul style="list-style-type: none"> The firm’s marginal / average cost will fall as the cost of producing each additional unit of output decreases. The firm’s overall costs will fall enabling it to decrease price; increase sales / profit. In the long run the firm can achieve economies of scale through specialisation. As the scale of the firm increases new specialist departments can be developed which will help to reduce their costs overall. e.g. HR department. 	<p>6</p>

10.

The data below has been adapted from Ireland’s National Accounts for 2021.

Description	Value
Net factor income from abroad	- €103bn
EU Subsidies	€1.7bn
EU Taxes	€0.5bn
Adjustments <i>Including</i>	€89bn
• Factor income of redomiciled companies	
• Depreciation on R&D imports and trade in IP	
• Depreciation on aircraft leasing	

Given that **Gross Domestic Product (GDP) at Current Market Prices (CMP)** was €426bn, use the information above to calculate terms **B** and **C**.

A has been completed for you.

State the relationships and show all your workings in the spaces provided below.

	Relationships / Workings	Ans. € bn’s
	Gross Domestic Product (GDP) at Current Market Prices (CMP)	€426bn
↓	Relationships / Workings: Gross Domestic Product (GDP) at CMP <u>+/- Net Factor Income from Abroad</u>	426.00 <u>(103.00)</u>
A	= Gross National Product (GNP) at Current Market Prices	€323 bn
↓	Relationships / Workings: Gross National Product (GNP) at Current Market Prices: €323bn + EU subsidies €1.7 bn - <u>EU taxes €0.5 bn</u>	
B	= Gross National Income at Current Market Prices	€324.2 bn
↓	Relationships / Workings: Gross National Income at Current Market Prices: €324.2 bn - <u>Adjustments: €89 bn</u>	
C	= Modified Gross National Income at Current Market Prices	€235.2 bn

2 @ 6

Section B: 300 marks

Question 11

(a)
28

Population 2016	Population 2022	Total Change
4,761,865	5,123,536	361,671

(i)

Using the data in the table below (extracted from the infographic) calculate the percentage change in the Irish population from 2016 to 2022. Show your workings.

$$\frac{361671}{4761865} \times 100 = 7.59 \%$$

- 1 Mark if % omitted

8

(ii)

Explain two factors which are likely to have influenced this trend in the Irish population.

- Increased birth rate: a high birth rate will help contribute to an increasing population. If the death rate in Ireland is decreasing and we have an increasing older population.
- Improved healthcare: improvements in access to medicines and medical technologies have led to an increase in the average age in Ireland meaning there is now a larger population.
- Positive net migration: there has been a larger increase in immigration than emigration during this period.
- War in Ukraine / international refugee crisis: the war in Ukraine has led to a large increase in Ukrainians entering Ireland / we have seen a large increase in the number of refugees seeking asylum.

2 x 5

(iii)

An increase in population can have a positive or negative effect on government finances. Discuss one negative effect and one positive effect on government finances.

Negative

- Pressure on provision of state services:
With an increasing population, there will be pressure on the government to provide and improve services. If it goes unplanned, shortages may develop in housing, education etc. putting a strain on the government's finances.
- Increased pressure on infrastructure:
The government will have to plan for additional such as schools and facilities for the younger population while also focusing on facilities for the older population. All of these put pressure on their finances.
- Increased pressure on state's finances:
If gaps in unemployment exist and cannot be filled, the government must continue to pay social welfare and may end up having to pay more.

5

		Positive	5
		<ul style="list-style-type: none"> • Increased demand for goods and services: The level of demand for goods and services should increase, increasing the national income. • Increased government revenue: The numbers joining the labour market should increase meaning increased tax revenue for the government. • Reduction in labour shortages: If vacancies exist, an increase in population may reduce this and reduce unemployment in general lowering the expense on social welfare. 	
(b)		Labour is one of the factors of production.	
24	(i)	<p>Explain the factor of production labour.</p> <p>Labour refers to all human effort which goes into the production of goods, services, and wealth.</p>	6
	(ii)	<p>Explain two factors that influence the geographical mobility of labour.</p> <ul style="list-style-type: none"> • Housing: if there is affordable housing available in an area, this may encourage people to move. The prohibitive costs of moving acts as a deterrent. • Educational facilities: if there are schools, childcare, universities etc. accessible, this may encourage families with children to move to an area. • Social infrastructure: if there are many social amenities in an area such as shops, parks, leisure facilities etc., this may encourage people to move. • Government supports: if financial aid was available to help with the move, people may be more willing to do so. • Access to supports for remote working e.g. broadband / work hubs etc. • Social connections: links with family / dependent relatives may restrict MOL. • Availability of work visas: for international workers limits mobility. • Availability of well-paid jobs in other areas i.e. Dublin v. rural areas in country. 	9 1st @ 5 2nd @ 4
	(iii)	<p>Explain two ways the government can possibly increase geographical mobility of labour.</p> <ul style="list-style-type: none"> • Financial incentives: to encourage firm to relocate and/or incentives to encourage individuals to do so. • Investment into housing: the lack of affordable housing is an impediment to mobility. If housing were made available in underutilised areas it could act as an incentive for re-location. • Funding for educational institutions: the provision of schools; colleges and institutes may make these areas attractive. • Increased infrastructural development: in these areas such as improved transport facilities; social infrastructure make these areas more attractive for relocation. • Improve access/affordability to those supports needed for remote working i.e. internet access etc / provide more rural working hubs. 	9 1st @ 5 2nd @ 4

(c)

23

The table below (adapted from the UNDP) shows the Human Development Index (HDI) rank and score of two countries in 2021.

Rank	Country	Human Development Index. (value)	Life expectancy at birth (years) SDG 3	Mean years of schooling (years) SDG 4.4	GNI per capita (2017 PPP \$) SDG 8.5
8	Ireland	0.945	82.0	11.6	76,169
153	Congo	0.571	63.5	6.2	2,889

(i)

In your opinion, if the average life expectancy in Ireland were to decrease, would it positively or negatively affect Ireland's HDI score?

Explain the reason for your answer.

Negatively.

- If average life expectancy were to decrease it would indicate a poor or declining health system in the country which would negatively impact Ireland's HDI ranking.

(ii)

Despite Ireland's high HDI ranking, inequalities still exist.

Outline two economic policies which the Irish Government could consider to address inequality in Ireland. Justify your answers.

- Invest in education: If the government abolished (hidden) fees that hinder access to education at all levels, this would remove a barrier that currently exists.
- Adjust the tax system: If direct taxes were reduced for workers on low incomes, this would increase their disposable income.
- Increase minimum wage: Increasing the minimum wage further would provide those on low incomes with further disposable income.
- Increase social welfare payments: While an obvious expense to the government, this would also provide those on low or no incomes to have further disposable income.
- Control rents: Rents are a high expense for many in this country. Proper control of the rents would lead to less exploitation and allow for further disposable income.
- Remove barriers to health care access: Some citizens are prevented access to health care due to their lack of income. Removal of such barriers and others would reduce inequalities.
- Increased regulation to decrease the gender pay gap.
- Increase employment opportunities: The government could promote job opportunities in various forms including advertisements and subsidies.
- Improved access to education / employment / social structures for people with disabilities.

1

4

9

1st @ 5

2nd @ 4

(iii)

If the policies you suggested in (ii) above were introduced, outline two possible economic disadvantages of the implementation of these policies.

- Education: abolishing fees could lead to too many people applying to go to college and universities and some may not be able to cope / not enough people doing apprenticeships for trades.
- Adjust the tax system: reducing direct taxes may mean we rely on increasing indirect taxation and hence inflation and/or relying too heavily on taxation from MNCs.
- Increase minimum wage: this pushes up costs for business and it may result in the closure of some firms.
- Increase social welfare payments: may have the effect of acting as a disincentive to work and negatively affect the labour supply.
- Control rents: may further increase the number of landlords leaving the housing market and make the housing crisis worse.

Note: one disadvantage of each policy required.

9
1st @ 5
2nd @ 4

Question 12

(a)

33

(i)

If a consumer wishes to purchase milk in the Irish market, they are currently faced with an abundance of choice from low-fat to super milk to lactose free milk. In the past this market was closer to a model of perfect competition.

Identify three characteristics of a perfectly competitive market.

- Large number of buyers. No individual buyer can influence the market price.
- Large number of sellers. No individual seller can influence the market price. Each seller is a price taker and accept the market price.
- Homogenous goods. All the goods are identical and hence there is no need for advertising.
- No barriers to entry. This means that firms are free to enter and exit the industry.
- Perfect knowledge of products, profits, prices. All firms have full knowledge of the profits being earned in the industry. All buyers are fully aware of the prices being charged for these products.
- Firms aim to maximise profits. They do this by maximising efficiency and minimising their costs.
- No Collusion exists in the industry. Firms do not join together implicitly or explicitly to control the supply and manipulate prices.
- Perfectly elastic supply of factors of production. All firms have access to the factors at existing prices.

12
3 @ 4

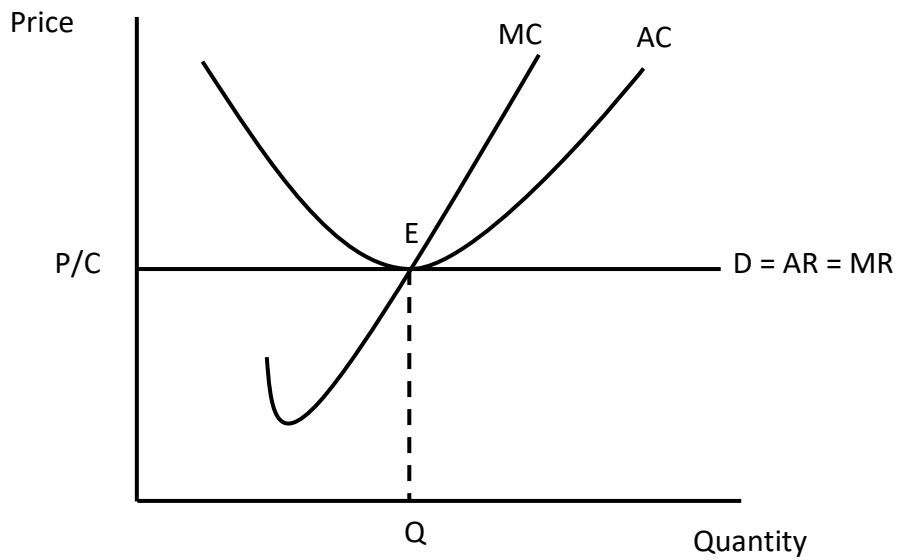
(ii)

Identify **one** reason why the market for Irish milk can no longer be considered perfectly competitive.

- There are some large sellers in the industry who can now influence price e.g. Kerry Group and Glanbia.
- Milk products are not homogeneous. They are now heavily differentiated with extensive advertising.
- Competitive advertising could possibly be seen as a barrier to entry.
- There is not perfect knowledge in the industry of prices, profits or products.

4

(iii) Explain, with the use of a fully labelled diagram (including the axes), the long run equilibrium of a firm in **perfect competition**.



9

1 mark per label = 9 marks

1 mark per label = 9 marks								
Price	Quantity	P	C	Q	MC	AC	D/AR/MR	E

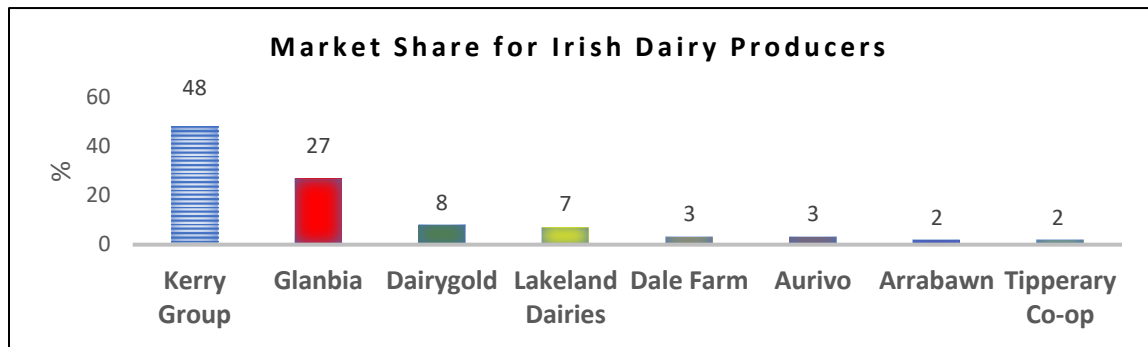
Explanation:

- Equilibrium is at point E (where $MC = MR$).
- Firms produce quantity Q.
- They sell the output at price P.
- Costs occur at level C.
- The firm earns normal profit as $AR = AC$.
- The firm is efficient as costs are at a minimum point of the ATC curve.

8

(b)
24

The bar chart below shows the market share for Irish Dairy Producers in 2021.



Adapted from www.Top1000.ie

(i) Based upon the figures in the bar chart above, calculate the Herfindahl Hirschman Index for Irish Dairy Producers. Show your workings.

$$48^2 + 27^2 + 8^2 + 7^2 + 3^2 + 3^2 + 2^2 + 2^2 = 3172$$

9

(ii) Would you consider this market to be competitive, moderately concentrated, or highly concentrated? Explain your answer.

5

- Highly concentrated.
- The market is dominated by two large firms.
- The HHI calculation of 3172 is greater than 2500.

(iii) Outline one possible economic advantage and one possible economic disadvantage of a perfectly competitive market.

1st @ 6
2nd @ 4

Advantages:

- Low prices - the firm sells its products at the lowest possible prices. (there is no exploitation of consumers).
- Efficiency is encouraged - the firm produces at the lowest point of the average cost curve so there is no waste of scarce resources.
- No advertising - the product is homogeneous and there is perfect knowledge so there is no point in wasting scarce resources on advertising the firm and this saves consumers having to pay higher prices.
- Consumers are not exploited - as each firm only earns normal profit.
- For firms - free entry and exit as they face no barriers to entry.

Disadvantages

- Little potential to expand or develop / no scope for economies of scale - as there are many small sellers, firms do not get large enough to benefit from economies of scale.
- Little choice for consumers - as all products are homogeneous, there is little choice for consumers.
- Little scope for research and development - lack of SNPs makes investment in R&D unlikely.

(c)
18

Budget 2023 proposed introducing a temporary 33% windfall tax on energy companies' profits, in line with the rest of the EU.
*Note a windfall tax is a tax on excess profits.

Discuss the arguments for and the arguments against this proposal.

For	Against
Reduce consumer exploitation. SNPs may indicate consumer exploitation through higher prices than necessary.	Deter future investment in energy development. If the government is seen to be heavily involved in regulation it may deter these companies from investing in future development. Electricity providers may argue that profits are their reward for innovation/ their incentive for future innovation may be reduced.
Help people during current crisis / Raise additional government revenue. Many Irish consumers are struggling to maintain their standard of living during the current cost of living crisis. The revenue earned could provide assistance.	Inadequate infrastructure. If investment declines it may mean that our future infrastructural development is hindered.
Support Irish businesses. The revenue earned could support Irish businesses (SMEs) who are facing increased costs.	Erratic future supply of energy. All of the above may lead to a less secure supply of energy in the future.
Achieve a more equitable tax system. The canons of taxation suggest that taxes should be levied on those who can best afford to pay and redistributed to those most in need.	

18
1st @ 8
2 @ 5

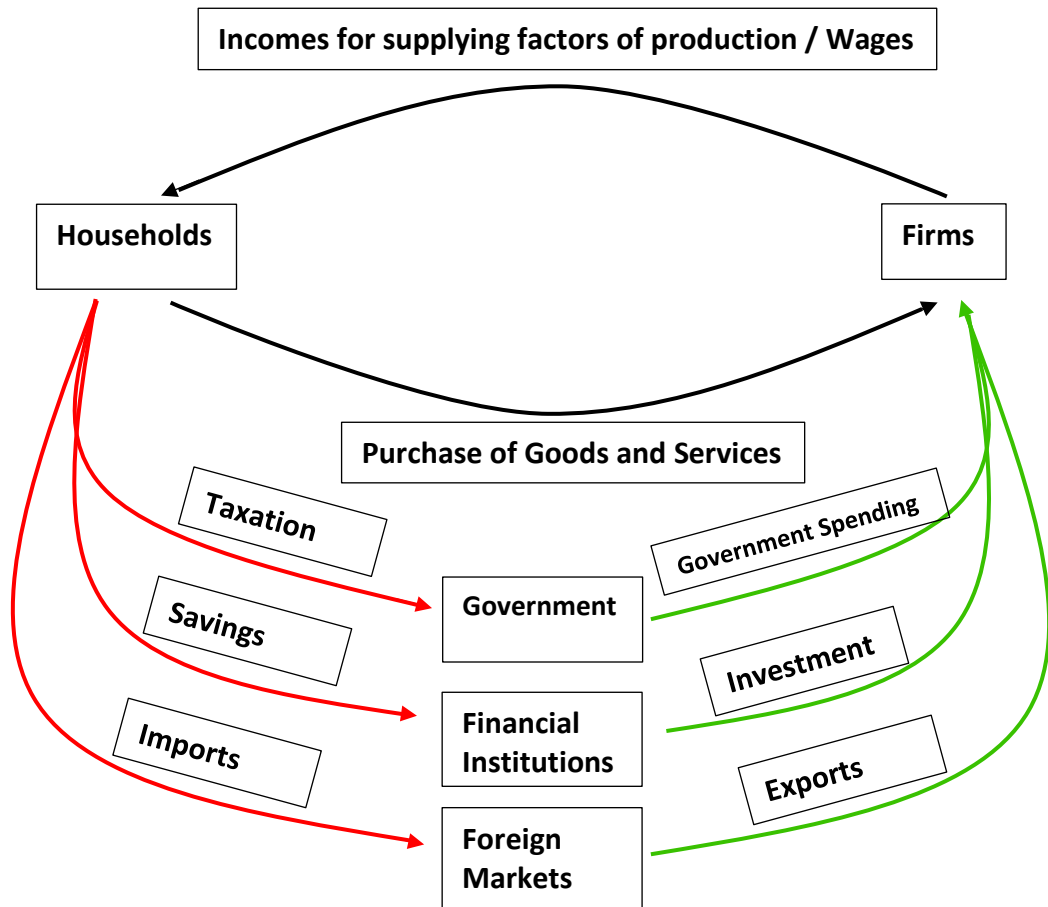
Question 13

(a)

33

(i)

Draw a fully labelled diagram showing the Circular Flow of Income for an open economy.



13 @ 1

(ii)

Explain the terms injections and leakages and refer to two examples of each from your diagram above.

Injections are variables in an economy that add to the circular flow of income. These cause an increase in aggregate demand. Aggregate demand will increase by the injection times the multiplier.

Examples: Government Spending, Investment, Exports.

Leakages are the non-consumption uses of income and these reduce the money available throughout the rest of the economy and thus reduce the circular flow of income.

Examples: Taxation, Savings, Imports.

2

2 @ 2

2

2 @ 2

(iii)

Some citizens engage in activities in the hidden economy in Ireland.
Outline two effects on the Irish economy of activities in the hidden economy.

- Loss of revenue for the government - in the form of taxes which they could have collected.
- Increased expenditure by the government on enforcement by state authorities.
- Increase in addiction rates / health implications - the numbers of people addicted to cigarettes may increase as they can be bought cheaper. This has implications on provision of future health services.
- Decline in legitimate business – it may not be feasible to compete with those who provide services in the hidden economy.
- Difficulty in providing state services – with less revenue the state may have to curtail certain services.
- Possible increase in crime levels in local communities due to illegal drug trade.

8
2 @ 4

(b)

22

Use the information in the table below, to answer the questions that follow:

Marginal Propensity to Consume (MPC)	0.7
Marginal Propensity to Import (MPM)	0.2
Current equilibrium level of National Income	€500m
Level of National Income that would give full employment	€750m

(i)

Calculate the marginal propensity to save (MPS) for this economy.
Show your workings.

$$1 - \text{MPC}$$

$$1 - 0.7$$

$$\text{MPS} = 0.3$$

6
3 @ 2

(ii)

Calculate the value of the multiplier in this open economy. Show your workings.

$$\frac{1}{\text{MPS} + \text{MPM}} = \frac{1}{0.3 + 0.2} = 2$$

OR

$$\frac{1}{1 - (\text{MPC} - \text{MPM})} = \frac{1}{1 - (0.7 - 0.2)} = 2$$

8
4 @ 2

(iii)

How much will the government have to inject into this economy if it wants the economy to operate at its full employment level? Show your workings.

$$\text{€750m} - \text{€500m} = \text{€250m}$$

$$250 / 2 = \text{Injection}$$

$$\text{€125m}$$

8

<p>(c) 20</p>	<p>Our income tax system is heavily reliant on a relatively small number of employees; just 500,000 workers and 10 multinational companies account for over one third of our total tax revenue. Statement by Pascal Donohoe on Budget 2023.</p> <p>(i) Outline two risks associated with over-reliance on MNCs for Ireland’s tax revenue.</p> <ul style="list-style-type: none"> • Vulnerable tax revenue position: MNCs pay most of Ireland’s corporation tax, which is hugely volatile. This could leave the government finances in a vulnerable position should these firms decide to leave Ireland. Ireland would be more likely to run large current government deficits. • Provision of state services not guaranteed: maybe an over reliance on this revenue means that the provisions of state services is not secure and the government needs to be more prudent. • Future infrastructural development of the economy may be at risk: if some of the MNCs were to leave the loss of tax revenue could jeopardise the development of our infrastructure. • Effects on future economic growth: if MNCs left the loss of jobs, incomes, profits, and a fall in exports would have a major negative impact on Ireland’s economic growth with decreases in economic growth there would be a decrease in the overall tax take for the Irish government. • Loss of tax revenue: if some MNCs decided to move out of Ireland, then the effects on the local and national economy could be significant. Their relocation has implications for income tax and indirect tax receipts. • Effects on employment: if MNCs relocate there could be large-scale unemployment of these firms decide to relocate to another country which could lead to a large increase in social welfare paid out. 	<p style="text-align: right;">12 1st @ 7 2nd @ 5</p>
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(ii)

Discuss two factors that are currently impacting on Ireland's international competitiveness.

- Transport costs: If transport costs are high (as is the case for Ireland as an island nation), then costs of production increase, prices rise and competitiveness falls.
- Exchange rates: If the euro were to weaken against the pound, eurozone exports would become more attractive to UK consumers.
- Costs of production: If costs of production increase (raw materials, energy, insurance), these tend to get passed on to the consumer in terms of higher prices which reduces competitiveness.
- Property prices / inflation rates: If prices in general are rising (housing, energy), this can make a country less competitive.
- Infrastructure investment: Investing in a country's infrastructure to develop the country's productive capacity makes it more competitive. Examples include motorways, ports, broadband, water and energy supply. A good infrastructure system makes a country more competitive.
- Access to suitably skilled labour: There has been an emphasis on science and technology education in Ireland over recent years meaning there is a wide availability of workers for pharmaceutical and ICT firms to operate here.
- Access to EU markets free of tariffs: By operating here, firms will have access to the larger market that is the EU. This means they can avoid certain tariffs if exporting to EU members states. This gives Ireland a competitive advantage.
- Taxation rates / incentives offered: if our taxation rates and incentives offered by the Irish state are more generous than that of our competitors then we have a competitive advantage.

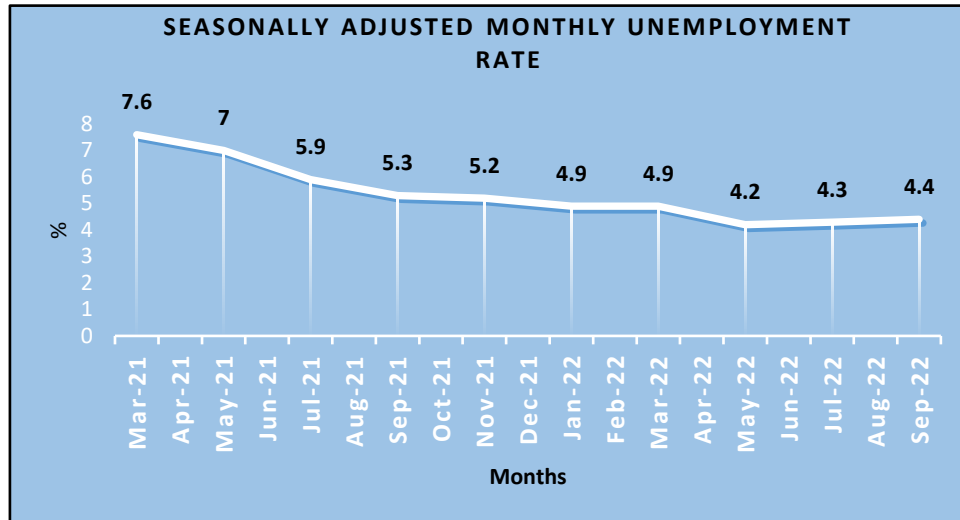
8
2 @ 4

(a)

26

Question 14

The graph below shows the monthly unemployment rate from March 2021 to Sept. 22.



Adapted from CSO

(i)

From the graph above analyse one trend in Ireland's monthly unemployment rate from March 2021 to September 2022, using figures from the above graph.

- Between March 2021 and September 2022, the unemployment rate fell. It fell from 7.6% to approximately 4.4%. This is a decrease of 3.2%.
- Between March 2021 and May 2022 the unemployment rate fell. It fell from 7.6% to approximately 4.2%. This is a decrease of 3.4%.
- Between May 2022 and September 2022 the unemployment rate rose. It rose from 4.2% to 4.4%. This is an increase of 0.2%.

8
(4+4)

(ii)

Another method of measuring unemployment is the Quarterly National Household Survey. Give two reasons why this measure is considered more accurate than data collected from the Live Register.

Award 4 marks to all candidates who attempted this question. Question should have stated Labour Force Survey and not Quarterly National Household Survey.

- The Live Register includes those who receive a partial social welfare payment: Some people on the Live Register are in employment but part time and are still eligible for social welfare payments. Technically, they are not out of work but are included as being fully unemployed.
- Full-time employment in the hidden or shadow economy: Some people on the Live Register work full time in the hidden/shadow economy and illegally receive a social welfare payment. As they receive a social welfare payment, they are counted as unemployed.
- Voluntarily unemployed: Some people on the Live Register are not actively seeking work.
- Labour Force Survey surveys a large sample size: The CSO surveys a large number of households each quarter. Statistically, the larger the sample size, the more accurate the results.

4

<p>(b)</p> <p>26</p>	<p>(iii)</p>	<p>Describe two types of unemployment giving examples to support your answer.</p> <ul style="list-style-type: none"> • Structural unemployment: This occurs when there is a mismatch between the skills of those that are unemployed and jobs available. E.g. jobs becoming obsolete due to new technology. • Frictional unemployment: This occurs due to frictions in the labour market. The transition between jobs usually takes time. E.g. a person is between jobs. • Seasonal unemployment: This is unemployment that can occur at certain times of the year. E.g. a person working in tourism may find themselves unemployed in the winter months in Ireland. • Cyclical unemployment: When there is a downturn or contraction in the economy, demand for goods or services tends to fall leading to unemployment. E.g. people lost their jobs during the Covid-19 pandemic. • Institutional unemployment: relates to unemployment created by institutional arrangements e.g. high minimum wage. 	<p>14 2@7</p>
	<p>(i)</p>	<p>Explain the economic term full employment.</p> <p>Full Employment refers to a situation in which all those members of the labour force who are willing and able to work are employed ⁴ at existing wage rates.²</p>	<p>6</p>
	<p>(ii)</p>	<p>Maintaining full employment is an objective of the government.</p> <p>Outline two other current economic objectives of the government in 2023, and justify your answers.</p> <ul style="list-style-type: none"> • Build more houses / reduce homelessness. • Control the price level. • Achieve sustainable economic growth. • Achieve social sustainability/Reduce inequality. • Achieve environmental sustainability. • Balanced regional development. • Increase international trade/competitiveness. • Maintain state services / provision of essential state services such as health services. • Improve national infrastructure. • Maintain fiscal stability. • Maintain stability in the financial sector. • Intervention / regulation to alleviate market failures /during national emergencies. 	<p>8 2 @ 4</p>

<p>(iii)</p>	<p>The Irish government spent €8.8bn on the Pandemic Unemployment Payment (PUP) in 2021.</p> <p style="text-align: right;">www.gov.ie</p> <p>Use a cost-benefit approach to assess who enjoyed the private benefit, the external benefit and who bore the costs of this scheme.</p> <p>Private benefit</p> <ul style="list-style-type: none"> • People who were left unemployed received a basic income to survive / citizens received money to spend on goods/services. <p>External benefit</p> <ul style="list-style-type: none"> • The government received taxation revenue from citizens spending on goods/services. • Continued spending allowed some businesses remain open. <p>Who bore the cost</p> <ul style="list-style-type: none"> • The government had to borrow to fund the scheme, some from European institutions. • Irish taxpayers must fund this into the future. 	<p>12 3 @ 4</p>
<p>(c)</p> <p>23</p>	<p>In the 1950s and 1960s Ireland had a very high rate of unemployment. During this period policy makers favoured trade protection.</p> <p>(i) Explain the economic term trade protection.</p> <p>Trade Protection refers to government policies involving the imposition of trade barriers such as tariffs which deliberately reduce/restrict international trade in the hopes of protecting domestic production and employment.</p>	<p>7</p>

(ii)

Some countries are now favouring a return to trade protection measures.
Discuss two economic reasons why countries are favouring a return to trade protection.

- Reduction in leakages from the circular flow of income: when we purchase imports, the money does not stay in the home country but favours the national income of the country or countries we are purchasing from.
- Protect domestic employment: there will be more of a reliance on domestically produced goods. This will keep people in jobs in the domestic economy.
- Reduce pollution: importing goods usually involves transportation which damages the environment. Trade protectionism may reduce this damage.
- Less-reliance on foreign markets: trade protectionism means we are not as reliant on other countries for goods or services.
- Political / Strategic reasons: Some sanctions and restrictions in trade have occurred as a result of political decisions such as Brexit or in response to the War in Ukraine.

**8
2 @ 4**

(iii)

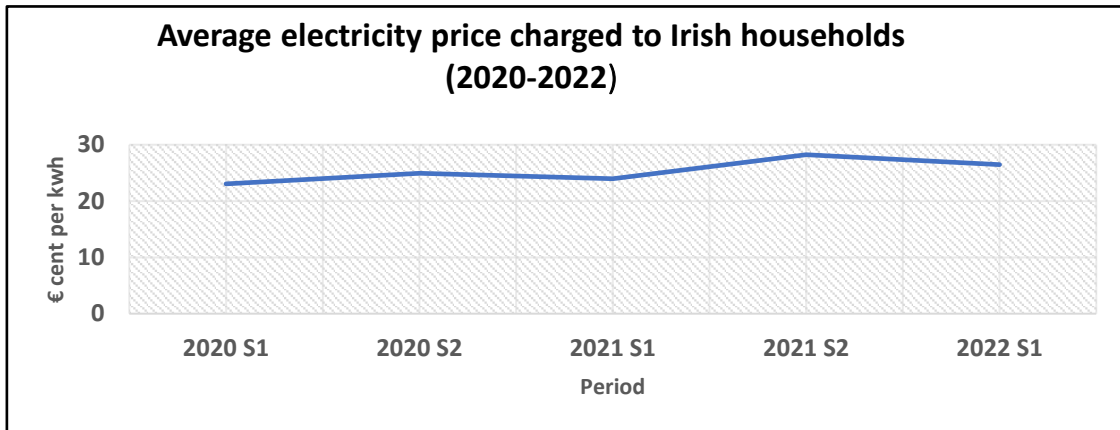
Outline two possible disadvantages of trade protection.

- Stagnation of technological advancements: as domestic producers don't need to worry about foreign competition, they have no incentive to innovate or spend resources on research and development (R&D) of new products. Firms may not benefit from economies of scale.
- Reduced choice for consumers: consumers have access to fewer goods in the market because of limitations on foreign goods.
- Increase in prices (due to lack of competition): consumers will need to pay more without seeing any significant improvement in the product.
- Reduction in economic growth: if many countries engage in trade protection then overall economic activity is reduced and this hampers growth / could damage employment prospects.
- Economic isolation: it often leads to political and cultural isolation, which, in turn, leads to even more economic isolation. Countries may become in trade wars and economic retaliation.

**8
2 @ 4**

Question 15

The diagram below shows the average electricity price charged to Irish households.



Adapted from sea

(a)

33 (i)

Outline one key trend in electricity prices, using figures from the graph above **and** explain how this will have impacted on Irish consumer behaviour.

Overall upward trend from S1 2020 to S1 2022.

Electricity prices increase from €21/€22 per kwh to €26/€27 per kwh.

Or Individual trend + figures e.g. 2021 S2 to 2022 S1

Impact on consumer behavior:

- Purchasing power reduced: Inflation reduces a consumers' ability to spend money. Standards of living fall due to rising prices as real wages have decreased.
- Consumers on fixed incomes suffer a reduction in their standard of living: Those on fixed incomes e.g. those on social welfare payments will also see their standard of living fall as their purchasing power has been reduced.
- Purchasing power of savings reduced: This will occur if the inflation rate is greater than the interest rate on savings. This reduces the incentive to save.
- Burden of debt reduced: Borrowing is encouraged during times of inflation as it easier to repay the debt after the period of inflation.

(ii)

Distinguish between demand-pull and cost-push inflation.

- Cost-push inflation occurs when increases in cost of production² are passed on to the consumer of the finished product in the form of higher prices².
- Demand-pull inflation occurs when (aggregate) demand is greater than (aggregate) supply² of goods and services in the economy leading to upward pressure on prices².

6

8
4+4

(iii)

The table below shows a country's composite price index for the following categories of expenditure: food, transport and other items. Using the information in the table below, complete the table to calculate the price index for the current year. The base value is 100. Show your workings.

Category	% of income (weight) spent on item (s)	Price of item (s) in base year €	Price of item (s) in the current year €	Calculation of Simple Price Index	Weight	Result
Food	60%	50	55	$\frac{55}{50} \times 100 = 110$	x 60%	= 66.0
Transport	25%	20	24	$\frac{24}{20} \times 100 = 120$	x 25%	= 30.0
Other Items	15%	75	81	$\frac{81}{75} \times 100 = 108$	x 15%	= 16.2
	100%				Price Index for the current Year	112.2

19

(b)

22 (i)

One role of the ECB is to formulate monetary policy for the Eurozone.

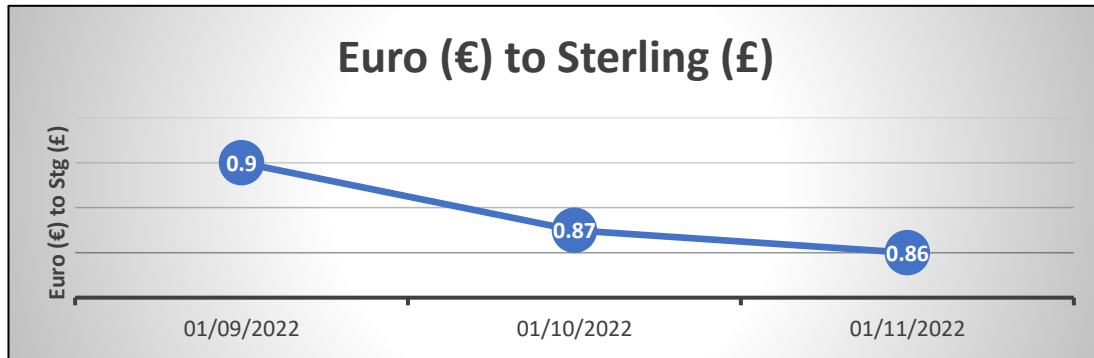
Explain the term monetary policy.

Monetary policy refers to any action by the European Central Bank which influences interest rates, money supply and availability of credit for the Eurozone.

8

(ii)

Does the trend on the graph below indicate appreciation or depreciation of the Euro (€) to Pound Sterling (£)? Appreciation: Depreciation:



Answer: Depreciation

Explanation: Between 01/09/2022 and 01/11/2022 the conversion rate of the Euro to Pound Sterling falls from 0.90 to 0.86.

This means that every Euro is now worth less i.e. 86 pence instead of 90 pence.

(iii)

Should the Irish government be concerned if the Euro to Dollar exchange rate is appreciating? Yes: No: Justify your answer.

6

Yes

Price of imports will decrease. This may lead to increased demand for imports / It will lead to greater leakages from the circular flow of income (as our currency will have greater purchasing power in terms of other currencies).

8

Price of exports will increase. It may make Irish goods and services relatively more expensive abroad thus reducing demand for Irish exports.

OR

No

Increased purchasing power / improved standard of living for Irish people. As Irish people/businesses can better afford foreign goods/raw materials it may lead to an improvement in their standard of living.

Reduced inflationary pressures: with decreased demand for exports and increased demand for imports it may reduce the inflationary pressures in the Irish economy.

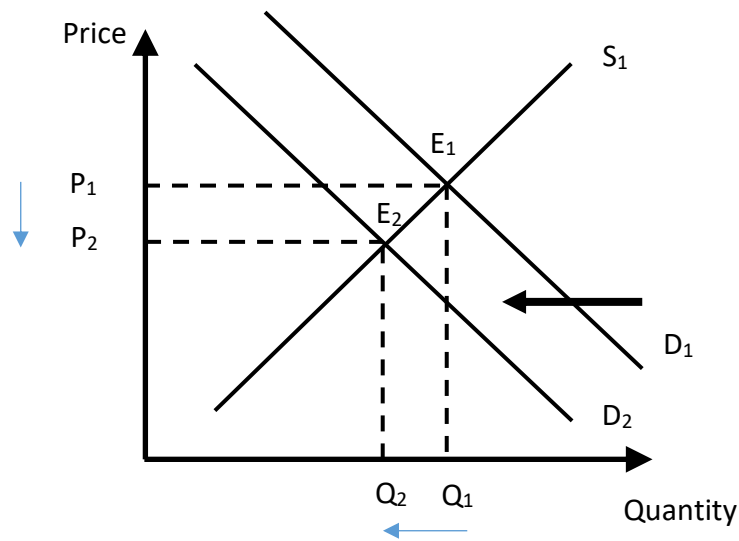
<p>(c)</p> <p>20</p>	<p>In budget 2023 the Irish government introduced a €600 electricity credit for all households.</p> <p>(i) Explain the main economic reason for the above government intervention.</p> <ul style="list-style-type: none"> • Help Irish citizens with the cost of living crisis/Inflationary pressures. • To protect those on fixed incomes as they suffer most. • To prevent citizens standard of living fall even if they faced the full increase in electricity prices. • Protect businesses who are experiencing rapid increases in costs. • Market failure: supernormal profits being earned through exploitation of consumers. A redistribution of resources requires government intervention. <p>(ii) Outline one possible economic disadvantage of this government intervention.</p> <ul style="list-style-type: none"> • Opportunity cost: this government expenditure is funded through government funds which could be used for another purpose. • It is not means-tested: universal payments of this kind are not equitable as some people who don't need support will receive it. • It could lead to increased borrowing: affecting future generations. • MNCs may come to distrust government fiscal policy: if they fear windfall taxes may be introduced to fund this intervention. • Electricity firms may continue to earn large profits: maybe they could be better regulated instead thereby reducing electricity prices reducing the need for this credit. <p>(iii) In your opinion does the above government intervention encourage electricity users to reduce their use of electricity? Yes: <input type="checkbox"/> No: <input type="checkbox"/></p> <p>Answer: No</p> <p>Explanation : As consumers can continue to purchase the same/a similar amount of electricity without needing to increase their expenditure it is likely that they will continue to use the same amount of electricity. Regardless of the price increases they will feel protected by the government's electricity credit.</p>	<p>7</p> <p>7</p> <p>6</p>
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Question 16

- (a) (i) Distinguish between the economic terms individual demand and market demand.
- Individual Demand refers to the quantity of a good or service an individual consumer is willing to purchase at various prices.
 - Market Demand refers to the quantity of a good or service all consumers in a market are willing to purchase at various prices.

28

- (ii) The Irish Government has provided free School transport for the 2022/2023 school year. Demonstrate, with the use of a fully labelled diagram, the impact this new scheme will possibly have on the market equilibrium for petrol/diesel cars.



- The demand curve will shift to the left from D_1 to D_2 .
- Why? Buses are substitute goods for cars. Some households will feel reduced need for a car as school transport has been provided. They will switch to the free transport.
- The equilibrium price will decrease from P_1 to P_2 .
- The equilibrium quantity will decrease from Q_1 to Q_2 .

- (iii) The rapid introduction of this scheme created an additional demand of 6,000 bus tickets in late September 2022 after schools had opened. Does this represent a government failure? Explain your answer.

Yes:

This government intervention into the market created a more inequitable market for some consumers who were unable to access school transport due to government inefficiency.

4

4

7

8

5

<p>(b)</p> <p>23</p>	<p>In 2006, multinational oil trading company Trafigura rejected an offer from a disposal company to deal with their toxic waste safely in The Netherlands for circa US\$620,000. Instead they got a local company to dump it illegally in Côte d'Ivoire for just US\$17,000 and in the process left more than 100,000 local people in need of medical assistance. Adapted from amnesty.ie</p> <p>(i) Does this represent a market failure? Justify your answer.</p> <p>Answer: Yes</p> <p>Explanation: Market failure occurs when the price mechanism in the free market leads to an inefficient / inequitable allocation of resources.</p> <p>The production of these goods has led to negative externalities for third parties such as individuals who aren't involved in the production or consumption of these goods have suffered the negative consequences of pollution and ill health.</p> <p>(ii) The Circular Economy and Miscellaneous Provisions Act 2022 became law in Ireland in July 2022. The circular economy aims to transition away from the traditional 'take, make, waste' economy.</p> <p>Outline two of the challenges the economy will face supporting the transition to the circular economy in Ireland.</p> <ul style="list-style-type: none"> • Consumer attitudes and behaviour: many consumers are unwilling to acknowledge/unaware of the ways they contribute to the traditional wasteful structure of our economy. • Consumers must be made aware of the full cost of products / services and be charged the appropriate price. Consumers may be resistant to higher prices. • Government objectives: if the government truly wishes to achieve a circular economy which doesn't exploit people or the planet, then the focus of some of their objectives will need to change. The constant pursuit of economic growth may come at the expense of people and the planet. • Business production methods: businesses need to amend production methods, distribution methods, sales expectations and introduce methods to extend the end of life of their products and reduce their negative environmental impact. Efforts made by firms to tackle waste generation may increase costs and act as a deterrent. • Government needs to provide infrastructure so as to provide citizens with responsible ways of disposing of waste i.e. compost / recycling facilities. 	<p>5</p> <p>8 2 @ 4</p>
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(iii)

On average households in Ireland are responsible for 117 kg of food waste. The cost to households is between €400 and €1000 per year.

Describe initiatives the Irish government could take to address the issue of food waste.

- Public awareness campaigns. Action on household food waste will achieve widespread public awareness of environmental and social issues around wasted food; and a significant increase in the number of people taking action on the issue, with a view to achieving the national target for a 50% reduction in food waste by 2030.
- Increased funding towards food waste charities. For example, Food Cloud have redistributed over 201.3 million meals in Ireland & internationally since 2013. By rescuing more than 84,555 tonnes of food from going to waste, over 270,576 tonnes of CO₂-equivalent has been avoided.
- National Food Waste Prevention Programme 2021 - 2027. The national campaign on food waste prevention aims to deliver through collaboration, impact, and measurement. The programme works across three core areas of Household, Supply chain and Hospitality.
- Research. The EPA, funded by the Department of the Environment, Climate and Communications, manages an environmental research programme that delivers essential scientific support for environmental policy development, implementation and broader decision making. The EPA Framework for Research 2021 to 2030 is built on four interconnected research hubs, one of which is 'Facilitating a Green and Circular Economy'.
- Introduce a levy on bins: this may incentivise households to compost and reduce their food waste / think more carefully about the amount of waste they generate.
- Local authorities could provide waste compost facilities: in local areas to encourage communities to compost and provide compost for home use.

1st @ 6
2nd @ 4

(c)
24

(i)

Deputy Barry Cowen described the ‘argument’ that the agricultural industry “must simply reduce the national herd” (dairy and beef) to play its role as “absurd”.

The argument for reducing the national herd (dairy and beef) is a controversial one.

Outline one argument for and one argument against this proposal.

For:

- The beef industry in Ireland is in decline and is dependent on government subsidies for survival and is one of the largest contributors to greenhouse gases.
- Emission credits costs. Ireland’s failure to meet its targets for reduction in emissions without buying emission credits comes at significant cost to the taxpayer. Financial penalties accrue to Ireland from the EU for missing environmental targets.
- Agricultural emissions are 32% of the national total. In order achieve our overall targets, key areas such as agriculture must become a focal point for the government.
- Environmental Sustainability. The Climate Action Plan 2021 sets out a roadmap for taking decisive action to halve our greenhouse gas emissions by 2030 and reach net zero no later than 2050. The overall emissions target for agriculture is a reduction of 22 to 30 per cent by 2030.

Against:

- Protection of rural economy. There is the argument of urban vs. rural bias in these interventions as it is rural farmers who will suffer most from these policies whilst urban will be unaffected.
- Inequitable approach. Whilst agriculture is one of the largest contributors to greenhouse gases in the country it is not the largest. Burning of fossil fuels by the non-ETS sector, for example in homes and cars made up 38% of all greenhouse gas emissions in Ireland in 2021. Dublin airport is also one of the largest contributors to greenhouse gases and it is flagged for expansion in the future.
- New mitigating technology and farming methodologies. The focus on culling half the herd may seem harsh if other methodologies and technologies aren’t first trialled.
- Falling prices in the dairy sector. The decrease in milk price in 2023 will lead to falling incomes for dairy farmers.
- Negative effect on Irish exports: if the herd is reduced then exports may fall with a reduction in our circular flow of income.
- Employment effects: if the herd is reduced then production of dairy products may fall resulting in unemployment.

1st @ 7
2nd @ 5

(ii)

The Deposit Return Scheme is to be introduced in February 2024. Anyone who buys a drink will pay a small deposit for the plastic bottle or can container. Customers will get their money back when they return the container to a retailer or other collection point to be recycled.

Outline two likely effects the introduction of the Deposit Return Scheme will have on the Irish consumer.

- Will incentivise consumers to return these containers / boost recycling: so producers can make new bottles out of old bottles and new cans out of old cans, which will lead to reduced waste.
- Reduced usage of scarce resources: in the use of plastic /aluminium and in the energy used to make these products.
- Reduced littering in public places: makes for an improved social infrastructure / less expenditure on cleaning.
- Reach our EU environmental targets: the scheme will help Irish consumers reach our EU environmental targets: and face less pressure /scrutiny with the EU.
- Possible reduced demand of these products: as the price has increased this may create a disincentive for some Irish consumers to purchase the product.

1st @ 7
2nd @ 5

Higher Level Economics Student Research Project

Before commencing marking read the entire Individual Investigative Study to familiarise yourself with the content presented for marking.

Note: Be careful not to penalise skilful brevity, nor to reward unwarranted length.

These descriptors should be interpreted in the context of the challenges and demands of the investigation the candidate has chosen.

Section	Excellent	Very Good	Good	Fair	Weak
Introduction LOI (Line of Inquiry)	LOI is stated clearly, as a question/problem/issue to be addressed and is relevant to the theme. The aims are very clearly laid out (SMART) and are in line with the line of inquiry chosen and Learning Outcomes of the specification.	A very good level of response. The LOI is coherent. The aims are reasonably clear and in context. Very good attempt at linking line of inquiry to the Learning Outcomes.	Good but lacks structure. A good attempt at linking the LOI with the theme but lacks depth and structure. Aims are vague and some not in context. Good attempt at linking line of inquiry to the Learning Outcomes.	Very basic level of response. Very poor linking of the LOI to the theme or the Learning Outcomes. Very poor aims if any offered.	Line of inquiry is not relevant to the theme or topic. No link to the Learning Outcomes.
10 marks	9-10	7-8	5-6	3-4	0-2
Evidence of Data: 5 marks	5	Deduct 1m if no quantitative data.	Deduct 1m if 2 sources not included.		

The Research Process 40 Marks					
	Excellent 9-10	Very Good 7-8	Good 5-6	Fair 3-4	Weak 0-2
Application & Analysis	Detailed application of key concepts and theories to the LOI. In depth critical analysis of LOI relevant to the concepts and theories used. Critical and perceptive analysis of the sources of information and data used.	Very good relevant application of key concepts and theories to the LOI. Very good critical analysis of the sources of information and data used.	Good relevant application of key concepts and theories to the LOI. Good analysis of the sources of information and data used.	A basic application of economic concepts and theories to the LOI. A basic analysis of information and data used.	No application of economic concepts and theories to the line of inquiry. Concepts and theories may be irrelevant to the line of inquiry. Analysis of sources of information and data if any are used is very poor and irrelevant.
Interpret & Evaluate	Excellent informed interpretation and evaluation of data, economic concepts and theories applicable to the LOI.	Economic concepts, theories, and data are interpreted and analysed to a very high standard.	Good interpretation and evaluation of economic concepts, theories, and data.	The Line of Inquiry is poorly researched and therefore a very poor standard of interpretation and evaluation. Some analysis could be incorrect.	Very poor selection of research sources. Basic if no interpretation or evaluation. Research irrelevant to the line of inquiry.
Arguments & Judgements	Excellent informed arguments and judgements are evaluated and interrogated in an objective manner and linked clearly with economic concepts and theories and supported with relevant data/diagrams/curves.	Very good informed arguments and judgements are evaluated. Some very good relevant arguments and judgements are discussed and supported by economic concepts, theories and relevant data/diagrams/curves.	Some good relevant arguments and judgements are put forward with some being supported by some economic concepts, theories, data/diagrams/curves.	Very limited arguments and/or judgements are put forward some being vaguely relevant.	No arguments or judgements are offered.
Data (Application & Analysis)	Data used is relevant, correct, critically analysed, interpreted and evaluated in depth to a very high standard.	Data is analysed, interpreted and evaluated to a very high standard.	Data is somewhat analysed, interpreted and evaluated to a good level. Lacks depth.	Data is poorly researched, some analysed correctly but some incorrectly applied and irrelevant.	Data if any provided is irrelevant and dated.
Research Process Overall Mark	36-40	28-35	20-27	19-12	0-11

	Excellent	Very Good	Good	Fair	Weak
Conclusion	<p>Very informed, relevant & substantiated judgements/conclusions clearly & explicitly based on the analysis & evaluation of the evidence relevant to concepts & theories.</p> <p>Intended aims have been met & relevant substantiated recommendations made.</p> <p>New relevant further line of inquiry suggested which emerged from the analysis of research.</p>	<p>Informed conclusions clearly based on the analysis and evaluation of the evidence with a clear link to concepts & theories.</p> <p>Intended aims have been addressed & most met. Relevant recommendations have been made.</p> <p>New somewhat relevant question/line of inquiry suggested.</p>	<p>Some conclusions are made based on the analysis and evaluation with some evidence that these are somewhat linked to concepts & theories.</p> <p>Intended aims are mostly met and some recommendations are made.</p>	<p>Some conclusions are made but limited evidence to support them. These may be based on irrelevant material.</p> <p>Some of the intended aims are somewhat addressed. Regurgitation and repetition of information already used is evident.</p>	<p>Little or no conclusions made with very little evidence to support them and irrelevant material used.</p> <p>Intended aims are not met. A lot of regurgitation and repetition.</p>
20 marks	18-20	14-17	10-13	6-9	0-5
Reflection	<p>Deep clear personal insights gained through deep insightful reflection on the engagement with the study.</p> <p>Clear thorough capacity to reflect on how their thinking/attitudes has changed or/and evolved, their opinions and/or behaviour influenced/not influenced as a result of engaging with the study.</p>	<p>Clear personal insights gained through reflection on the engagement with the study.</p> <p>Clear capacity to reflect on how their thinking/attitudes has changed or/and evolved, their opinions and/or behaviour influenced/not influenced as a result of engaging with the study.</p>	<p>Some personal insights gained through some reflection on the topic.</p> <p>Some reflection on how their thinking/attitudes has changed or/and evolved, their opinions and/or behaviour influenced/not influenced as a result of engaging with the study.</p>	<p>Limited personal insights gained through limited reflection on the topic.</p> <p>Limited reflection on how their thinking/attitudes has changed or/and evolved, their opinions and/or behaviour influenced/not influenced as a result of engaging with the study.</p>	<p>No personal reflection – inadequate reflection. Re-telling of facts learned.</p> <p>No personal insight into how their thinking/attitudes has changed and/or evolved, their opinions and/or behaviour influenced/not influenced as a result of engaging with the study.</p>
10 marks	9-10	7-8	5-6	3-4	0-2

	Excellent	Very Good	Good	Fair	Weak
Communication Presentation & Overall Coherence	<p>Extremely coherent & highly logical SRP in line with the brief and individual line of inquiry chosen.</p> <p>Construction is excellent. Communication of concepts, theories and data used is thorough and appropriate.</p> <p>Arguments and judgements are communicated with detailed knowledge, critical thinking and sharp focus.</p> <p>Excellent originality and innovation are evident throughout.</p>	<p>SRP is coherent & logical in line with the brief and individual line of inquiry chosen.</p> <p>Very good construction.</p> <p>The language, concepts & data used are well integrated.</p> <p>Arguments and judgements are communicated with good knowledge and evidence of critical thinking.</p> <p>There is evidence of originality and innovation.</p>	<p>SRP is somewhat coherent & logical and is reasonably in line with the brief and individual line of inquiry chosen.</p> <p>Reasonable construction.</p> <p>Communication of arguments and judgements displays a good level of knowledge.</p> <p>Very little evidence of originality and innovation.</p>	<p>A poor attempt at delivering a coherent and logical SRP.</p> <p>Poor construction. Communication is disjointed and lacks cohesion.</p> <p>Little to no evidence of originality and innovation.</p>	<p>This report totally lacks structure & coherence.</p> <p>The report lacks focus and clarity.</p> <p>The report contains incorrect information/plagiarism.</p>
15 marks	14-15	11-13	8-10	5-7	0-4

