

Coimisiún na Scrúduithe Stáit State Examinations Commission

Leaving Certificate 2022

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.
- This marking scheme used descriptor marking to allocate marks for certain parts of some questions for the development of a point/points. Copies of the descriptor marking that were used are in the tables below. The descriptor mark that was used was dependent on the mark allocation for that particular part of the question.

Questions with allocation of 3 marks – use the table below:

3	2	1	0
Excellent	Good	Fair	Weak
In-depth knowledge	Some knowledge	• Vague	No knowledge
 Relates to question 	• Limited	knowledge	Repetition of
 Concise 	development		statement
• Logical			

Questions with allocation of 4 marks – use the table below:

4	3	2	1	0
Excellent	Good	Fair	Poor	Weak
In-depth knowledge	• Some	 Vague 	 Confusing 	No knowledge
 Relates to question 	knowledge	knowledge	or	 Repetition of
Concise	• Limited		Contradictory	statement
• Logical	development		knowledge	

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
3	Page seen by examiner / information not valid	N/A

SECTION A (75 marks)

Q		Possible responses	Marks
1.	(a)	Using an appropriate formula, calculate the price elasticity of demand depicted in the diagram where the original price of the good is $\[\in \]$ 4 and increases to $\[\in \]$ 5. Show all calculations. $ \frac{\Delta QD}{\Delta P} \times \frac{P1 + P2}{QD1 + QD2} $ $ \frac{-4}{+1} \times \frac{(4+5)}{(8+4)} = -3 $	10
	(b)	With reference to the graph above explain the law of demand. The Law of Demand states that as the price of a good or service increases the quantity demanded of that good or service decreases, and vice versa. This can be seen above with good X as its price increases from €4 to €5 its quantity demanded decreases from 8 to 4.	5
2.	(a)	Using the data provided, explain, whether the Balance of Payments is likely to have an overall expansionary or contractionary effect. Refer to relevant figures in the diagram above to explain your answer. Indicate by means of a tick (✓) whether it is expansionary or contractionary. Answer: Expansionary Exports have increased by 6.4% and imports have increased by 5.4%. The increase in exports is (1%) larger than the increase in imports thus the injections are larger than leakages which with have an overall expansionary effect on the economy.	9
	(b)	 Outline one factor which could have influenced the above trend in Personal Consumption in Quarter 2, 2021. Pent up demand: consumers couldn't spend during lockdowns. Increases in income: employees who return to employment following lockdowns will now have higher disposable income (than that received on PUP, EWSS, TWSS etc). Increased consumer and business confidence: may encourage consumers to spend on those items which they deferred i.e. holidays. Expectations of future price increases: with increasing demand consumers may fear than prices will increase in the future and so buy now. 	6 (3+3)

3.	(a)	Minimum Unit Pricing (MUP) for alcohol was introduced in Ireland in early 2022.	9
		Do you agree with this new MUP for alcohol? I agree with MUP:	(5+4)
		 May combat alcohol abuse - the higher price may combat alcohol abuse / binge drinking by decreasing consumption. Less personal /social problems - reduced consumption leads to a reduction in personal /social problems in society. Reduced admissions to ED's - reduced consumption should result in reduced admissions to ED's, allowing hospitals to function more efficiently and so help reduce health costs. A healthier population - if per capita consumption decreases, it may result in a healthier population with less days lost to absenteeism / increased productivity. I disagree with MUP: 	
		It is inequitable - as it is regressive it will impact those on lowest incomes	
		the most.	
		 Cross border shopping - it may lead to increased cross border shopping resulting in a loss of economic activity in the Republic. and a loss of tax revenue. 	
		 Unnecessary state interference - it is an unnecessary state interference in personal decision making &only applies to those who buy cheaper alcohol. Effect on hidden economy – some people may resort to finding alternative sources of alcohol resulting in a loss of tax revenue. Switch to alternative drugs – if other drugs are cheaper it may result in an increased demand for these. 	
	(b)	The purchase of alcohol in the free market may generate a market failure . Explain this statement using an example to illustrate your understanding.	6 (3+3)
		Market failure occurs when the price mechanism in the free market leads to an inefficient / inequitable allocation of resources.	
		The production of these goods may lead to consumers, consuming harmful goods, being exploited, or generating negative externalities for third parties such as individual taxpayers who aren't involved in the consumption of alcohol paying for the healthcare of individuals who overconsume alcohol.	

4. (a) Categorise each of the following as either an **injection** or a **leakage** from the circular flow of income.

3+3+2

	Injection	Leakage
The Irish government increases public	✓	
sector salaries by 1% in 2023.		
Irish exports increase to record €160 bn	✓	
despite the Covid 19 Pandemic.		
Irish consumers saved more than		√
€10bn in first quarter of 2021.		

3+2+2

Answer either (b) or (c)

- (b) In the box below justify each of your choices in part (a) above.
 - Public sector salaries are a part of government spending, so government spending is an injection into the circular flow of income.
 - Exports is money that originates outside the circular flow of income and thus is an injection into the circular flow of income.
 - By not spending their income consumers are reducing the size of the circular flow of income thus saving is a withdrawal/leakage.

OR

- Outline two reasons why inflows of foreign direct investment into Ireland are important for the Irish economy.
 - Increased employment opportunities for Irish labour force. With increased investment into the Irish economy there will be increased demand for labour to work in new firms and existing firms which have undergone expansion.
 - Increased tax revenue for the Irish government from corporation, capital
 gains, income and value-added taxation. With increased investment,
 employment, expenditure and possible profit the government is likely to
 earn more tax revenue.
 - Increased economic growth / increased exports. Increased investment is an injection into the circular flow of income and will encourage further economic growth. The national income formula of C+I+G+X-M indicates that an increase in investment into the Irish economy is likely to have a multiplier effect overall.

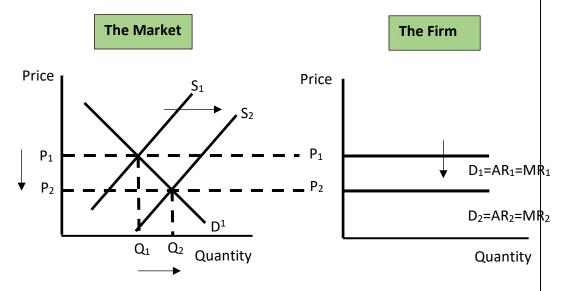
(a)	It is predicted that the number of people in Ireland aged over 65 will reach 1 million by 2031. This significant change in the ageing demographics is a global phenomenon. Adapted from socialjustice.ie Explain two factors which are likely to have influenced this trend in the Irish population. Improvement in healthcare in Ireland: resulting in improved treatment of illness and reducing death rates. Improved standard of living/increased income/increased employment allows people to buy better quality food, access health care and improved infrastructure. Increased focus on a healthy lifestyle in modern society: people are more conscious now of maintaining a better lifestyle as they age and are taking care of themselves. Improved planning by government & state agencies in recognising the need for improved policies to cater for the ageing population.	1x4 1x3
	 Answer either (b) or (c) Outline two economic advantages of an ageing Irish population. Increased numbers may participate in the labour force due to people living longer. More experienced workforce as these workers bring many years of experience. Skill shortages may be filled by retired workers returning to the workforce i.e. the hospitality sector. Tax revenues: if older workers remain in the workforce then it allows for increased tax revenue/ less need to provide for pensions/increased spending. Opportunities for businesses: the change in the pattern of demand for goods and services for an ageing population may present opportunities for business e.g. over 55 holidays. 	4+4

(c)	OR	
	Outline two impacts Ireland's ageing population will have on future government policy.	7 (4+3)
	 Increased spending on healthcare or change in budget priorities for health care. 	(4.3)
	 Increased pressure on pensions / many people under providing for old age / may need to means-test the contributory pension / increase in pension age. 	
	 More demands on government services e.g. health and long-term care. Increased investment in independent living facilities: a move to the European norm. 	
	 Possible increased tax burden for those remaining in the workforce. Impact on unemployment: if people extend their working life this may have an impact on long-term unemployed / youth unemployment etc. 	
	 Employers may have to face higher wage costs if more senior staff remain Labour market: may cause dependency ratio problems / reduced labour market participation rates. 	
		8 P a g e

(a) Firms in Perfect Competition are said to be Price-Takers.

On the diagrams below label and illustrate

- (i) What happens to the market equilibrium as more firms enter the market?
- (ii) What happens to the individual firm's price as more firms enter the market? Explain each of your diagrams below.



Explanation for the market:

As firms outside the industry become aware of the SNPs earned in the industry these firms will enter the industry which they can do as there are no barriers to entry. As these firms enter the market supply will shift to the right from S_1 to S_2 . This quantity supplied increases from Q_1 to Q_2 and decreases the price from P_1 to P_2 .

Explanation for the firm:

As the individual firm is described as a price-taker they must accept the price established by the industry, thus their price also decreases from P_1 to P_2 .

(b) Answer either (b) or (c)

Firms can survive in the S/R even if they are making a loss. Explain this statement.

- In the short run if AR is greater than AVC
- The firm is making a loss but once it covers its average variable costs it will
 contributes towards its fixed cost then the loss from shutting down would
 be greater than the loss from continuing to operate.

(c) OR

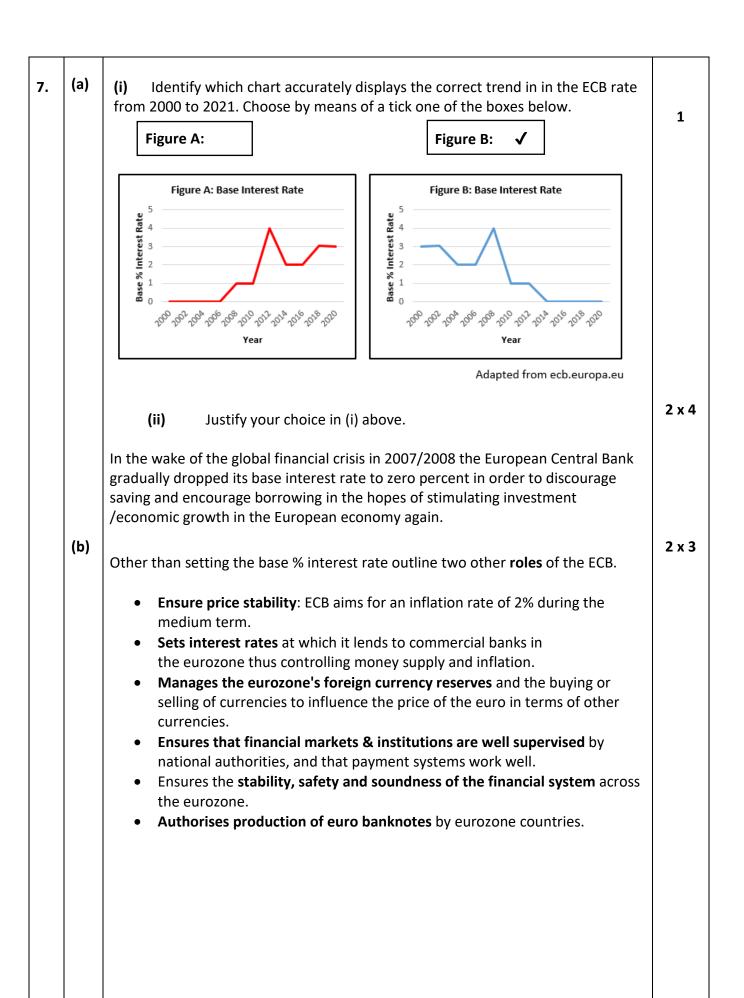
In the long run only the most efficient firms will survive. Explain this statement.

A firm is most efficient when it is producing at the minimum point of AC. If it is not producing at the minimum point of the average total cost curve in the long run is not being efficient. It will not be earning normal profit and so will be forced due to inefficiency to leave the industry.

4

2

2

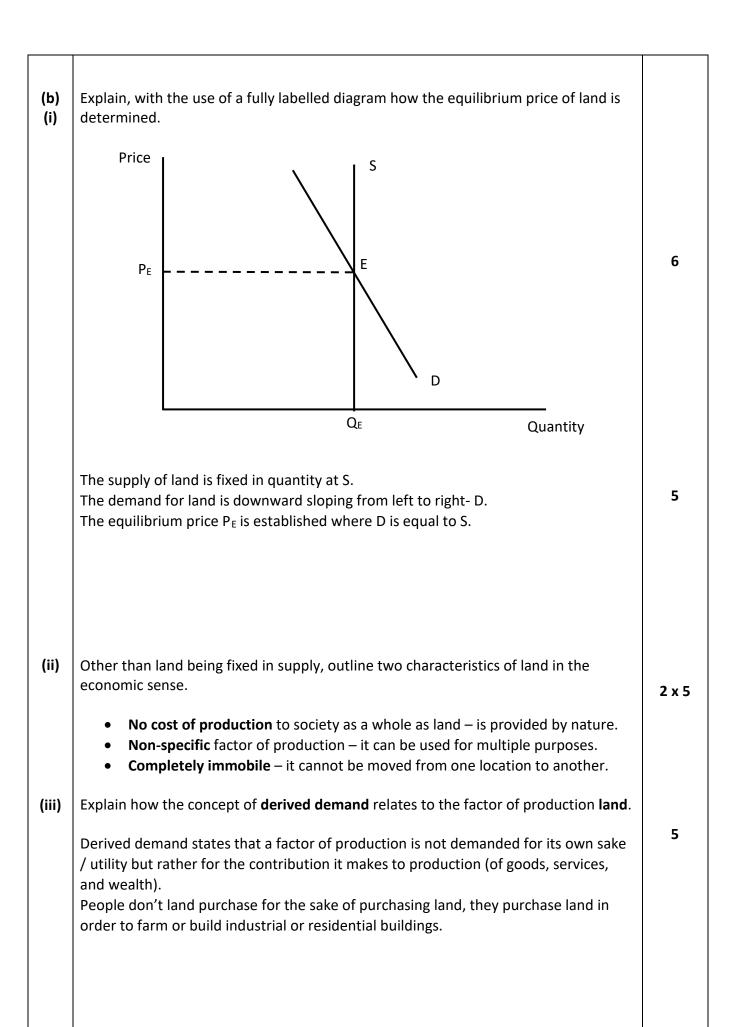


(a)	Explain what is meant by the economic term hidden economy	
	 Hidden economic activity refers to all economic activity which goes unrecorded in national income accounts. It refers to incomes from illegal sources /undeclared incomes from the production of goods & services from either monetary or barter transactions. Activities outside the tax/regulatory systems. 	5
(b)	 Outline two reasons for the supply chain issues which many companies experienced in Ireland during 2021 – 2022. Covid-19 impacts: Covid-19 has created backlogs on production lines which has slowed down the supply chain i.e., closure of factories in China. Brexit effects: Brexit has created delays through changes to policies and increased bureaucracy and paperwork. Suez Canal blockage: The blockage in the Suez Canal slowed down the transport of some goods for an extended period of time during the year. Invasion of Ukraine by Russia has disrupted the supply of wheat to world markets. 	2 x 5 (3+2)
(a)	Identify one private cost and one private benefit for the consumer of installing solar panels. The private cost of installing solar panels is the financial cost to the individual consumer incurred from their installation. A private benefit for the consumer of installing solar panels is that their personal electricity bill may be reduced due to the use availability of electricity from a renewable source.	5
(b)	Installing solar panels also creates social benefits . Discuss this statement. Social benefits are benefits to society i.e., third parties not involved in the production or consumption of the good. Through using solar panels there will be reduced use of electricity from non-renewable sources reducing the usage of these finite resources, and less harmful emissions into the environment.	5
	(b)	 Explain what is meant by the economic term hidden economy. Hidden economic activity refers to all economic activity which goes unrecorded in national income accounts. It refers to incomes from illegal sources /undeclared incomes from the production of goods & services from either monetary or barter transactions. Activities outside the tax/regulatory systems. Outline two reasons for the supply chain issues which many companies experienced in Ireland during 2021 – 2022. Covid-19 impacts: Covid-19 has created backlogs on production lines which has slowed down the supply chain i.e., closure of factories in China. Brexit effects: Brexit has created delays through changes to policies and increased bureaucracy and paperwork. Suez Canal blockage: The blockage in the Suez Canal slowed down the transport of some goods for an extended period of time during the year. Invasion of Ukraine by Russia has disrupted the supply of wheat to world markets. Identify one private cost and one private benefit for the consumer of installing solar panels. The private cost of installing solar panels is the financial cost to the individual consumer incurred from their installation. A private benefit for the consumer of installing solar panels is that their personal electricity bill may be reduced due to the use availability of electricity from a renewable source. Installing solar panels also creates social benefits. Discuss this statement. Social benefits are benefits to society i.e., third parties not involved in the production or consumption of the good. Through using solar panels there will be reduced use of electricity from non-renewable sources reducing the usage of

10.	(a)		6
		Calculate the opportunity cost of PepsiCo moving from point D to point H on the PPF curve. Explain your answer.	
		 Tropicana decreases from 62 million litres to 0 litres. Thus, the opportunity cost is 62 million litres of Tropicana³ 	
	(b)		
		The point X (20,20) is another production possibility for PepsiCo. Would you recommend them to produce at this point? Explain your answer.	9
		No, as it can be seen as waste of resources. If it produces within the boundaries, it is not making the best use of scarce resources and is thus said to be inefficient. The maximise the use of its resources / to produce efficiently it could produce more - either 20 lts of Tropicana & over 80 kgs of Doritos or 80 lts of Tropicana & 20 kgs of Doritos.	

SECTION B (225 Marks)

	Question 11	
	Possible responses	Max Mark
(a) (i)	 Outline two possible reasons for the disparity in average rents between Dublin City and Waterford City in Q2, 2021. Greater population per sq. km in Dublin creates greater demand for housing – land is fixed in supply and there are only so many viable residential sites. Thus, the greater the population in a given area, the higher the house prices are likely to be. Greater number of people employed in Dublin than Waterford – there are a greater number of jobs in Dublin than there are in any other region across the country. The more jobs there are in an area the greater the demand for housing in that area will be. Greater amenities and services available in Dublin make it a more attractive place to some renters – there are more services and a more diverse experience in Dublin which may be a draw for renters especially migrant renters, international students etc. Less available residential land in Dublin pushing up its value – the more land that is used up in Dublin for office spaces the less land there is available for residential properties. Planning restrictions also restrict having skyscraper apartments or offices which reduces the number of construction options available. 	1 x 8 1 x 4
(ii)	 Outline two possible interventions the Irish government could pursue to support balanced regional development in Ireland. Increased investment in industry in rural areas – if the Irish government can put additional funding into supporting industrial development in underdeveloped regions of the country it may act as an incentive for more firms and production facilities to set up in those regions which will bring more jobs and prosperity to the area. Tax breaks for firms in rural areas – if firms agree to operate in regions of Ireland which have traditionally seen lower investment this could be rewarded though lower tax rates. Increased investment in infrastructure including broadband networks in rural areas – if the Irish government can put further funding into infrastructure in underdeveloped regions of the country it may be more of a draw for business, industry, and families. Incentives for those who are willing to relocate from urban to rural areas – the government could provide financial incentives for workers who are willing to relocate to less developed regions. If the government can provide this, it will help to strengthen the labour force in these regions. Increased social housing in rural areas – with increased housing options in these areas it will allow for greater geographical mobility which could help to strengthen the labour force in these areas. 	1 x 8 1 x 4



(c) It is estimated the North Runway Project at Dublin airport will support the creation of 31,200 new Irish jobs and €2.2 billion in additional economic activity by 2043. The project is estimated to cost €250m - €500m.

Adapted from international airportreview.ie

(i) Explain the term opportunity cost.

8

Opportunity cost refers to the cost of foregone alternatives / cost of the next best choice when making a decision.

(ii) Outline **one** opportunity cost involved in the above government expenditure on transport, using an example to illustrate your answer.

5

Example: spending forgone on building new hospitals / schools.

As this is capital expenditure - the answer must feature an area of capital expenditure.

(iii) The Irish government should provide more financial support to regional airports around Ireland. Discuss the arguments for **and** against this statement.

2 x 6 (3+3)

Must have a minimum of one argument either for or against

For financial support:

- Supports the government objective of balanced regional development if more funding is provided to the regional airports instead of the national airport it may help to spread growth more evenly across the country.
- Supports employment in rural areas keeping these regional airports running helps to support employment within the airports and in related industries in those regions.
- **Supports developing rural Ireland** as a viable option for communities to live and work / reduce pressure on expanding cities.

Against financial support:

- Opportunity cost is funding for more developed urban airports if more funding is put into regional airports, it may mean that less funding is available for our international airport which is a more significant airport for Ireland's international trade.
- The greatest need requires the greatest support in terms of performing a cost-benefit-analysis, the government will look to spend the most on the airports which are likely to give the highest return. This is likely to be the airports which are already the most developed.
- More links to industry and investment elsewhere if the government invests this money in other areas, it is more likely to be supported with additional investment from other industries than if it were invested in regional airports.
- More employment is generated in other airports whilst providing funding to regional airports will support employment in those regions. It is likely that more employment could be created elsewhere with the same funding.

	Question 12	Max Mark
(a)	Possible Responses	
	(a) The pie charts below show the market share of domestic electricity suppliers in Ireland in 2005 and in 2019. Below the pie charts are the relevant Herfindahl-Hirschman Index figures.	
	MARKET SHARE OF DOMESTIC ELECTRICITY SUPPLIERS IN IRELAND 2005 MARKET SHARE OF DOMESTIC ELECTRICITY SUPPLIERS IN IRELAND 2019 Panda Pinergy PrePayPower 2% 1% Others 1%	
	Energia 8% SSE Airtricity 12% Bord Gáis 53% Electric Ireland (Formerly ESB) 53% ESB (Now Electric Ireland) 16%	
	HHI in 2005 was 10,000 HHI in 2019 was 3,328	
	Adapted from Statista.com	
(i)	Comment on what the HHI results outlined above indicate about the market concentration in this industry over this time period (2005 to 2019). • In 2005 the HHI figure of 10,000 indicates that this industry was highly concentrated. 10,000 indicates that the market is a monopoly as there is	
	only one producer.	3 x 3
	 By 2019 the concentration has decreased to 3,328 as more firms have entered the industry. 	
	 However, as this number is still greater than 2,500 and is still highly concentrated e.g., top 3 firms control over 80% of the industry. 	
(ii)	Explain two reasons why a government would decide to deregulate its electricity supply.	
	Offer consumers more choice/larger quantity of service provided – firms may engage in non-price competition to entice more consumers to purchase their product / service. Offer more price competition within the market, the most direct form of	
	 Offer more price competition within the market – the most direct form of competition firms will engage in is directly through price competition. This is a positive for consumers as they get the product at a cheaper price. 	
	 Encourage greater efficiency / less waste of scarce resources – more firms competing together in the industry may mean that firms strive to achieve greater efficiency and so ensure their long-term survival. 	2 x 3
	 Encourage more research and development in the industry – to remain competitive and hopefully push ahead of their competitors, firms may engage in more research and development which will also benefit the consumer through an improved product i.e., the development of sustainable sources. Reduced state involvement – the government becomes less involved in the market and may allow it more time to devote to essential activities i.e., health provision. 	

(iii) Explain the term privatisation. 4 This is the sale of a state-owned company / asset in whole or in part to the private sector. (iv) A government could choose **privatisation** of a semi state body over deregulation. Outline one reason why a government may choose to privatise a semi-state body (2+3)instead of deregulation. Generates revenue for the Irish government which can be injected into the Irish economy creating a positive multiplier effect. No longer supporting loss-making services. The government won't be required to fill in losses of semi-state companies with taxpayer funds. **Employment opportunities**. In the case of a new firm, if it increases its market share, then this may result in a growth in employment together with additional job security for existing employees. e.g., IAG purchase of Aer Lingus. Reduced government intervention in the day-to-day running of the business. **Creates greater competition** within the industry leading to lower prices for consumers **Greater efficiency/innovation** is encouraged within the industry. Creates a greater choice of service and supply of services providers for consumers. **Enterprise culture** - Increased share ownership may lead to growth in an enterprise culture within the country and so help employment. (b) The market structure in the pie charts in (i) above in 2005 are best described as a (i) State Monopoly and in 2019 it is best described as an Oligopoly. Outline one advantage of both types of market structure. **Monopoly Advantages:** 5 **Economies of Scale** – production on a large scale may help the firm benefit (2+3)from economies of scale and these cost savings may be passed on to the consumer in the form of lower prices. **Guaranteed supply of product/service** – the supply of the product/services may be guaranteed and provided where profit is minimal (e.g., a state monopoly) so consumers benefit e.g. provision of bus services in areas of low population. More secure employment – as there is no competition employees have greater security of employment/may benefit from preferential conditions of employment/better rates of pay and pensions. **Reduced use of scarce resources** – there may be less duplication in the provision of products/services. There may be less need for competitive advertising, so society's resources are not wasted. Certain services may be best provided by on provider e.g., train tracks/electricity grid so as to avoid duplication. Potential for innovation/R&D – the (supernormal) profits that monopolies

may make could be used for investment in R&D and secure their dominance in the market. Investors/creators need patent protection otherwise they may

not invent.

Oligopoly Advantages:

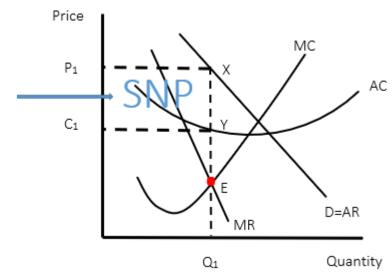
5 (2+3)

- Stability in prices / price comparability If firms engage in non-price
 competition, then prices tend to remain stable, and this enables the
 consumer to plan ahead and stabilise their expenditure. It is easy to compare
 prices as there are few firms which forces firms to set prices competitively,
 which is good for consumers.
- **Profit levels** Firms may have to sacrifice some of their profits to keep customers or undercut rivals / the existence of high profits may mean that the government benefits through higher taxation revenue/ firms may be able to afford to engage in R&D.
- Quality of product /service Firms may improve the quality of products so as to attract and retain consumers. Firms provide higher quality, more frequent services and other upgrades to maintain consumer loyalty.
- **Benefits of advertising** With advertising consumers may be better informed. This may save consumers time and money in searching for and learning about goods and services. Advertising may encourage innovation, technological development leading to improved products and services.
- Possibility of lower prices Economies of scale may be passed onto the
 consumer in the form of lower prices. If firms adopt a highly competitive
 strategy they can generate similar benefits to more competitive market
 structures, such as lower prices.
- **More secure employment** As there is little competition between firms, jobs may be more secure with the industry.

(ii)

Explain, with the use of a fully labelled diagram, the long run equilibrium position of a monopoly firm.

11



1 mark per label = 11 marks										
Price	Quantity	P ₁	Q_1	C_1	Е	D/AR	MR	MC	AC	SNP

- Equilibrium is at point E (where MC=MR).
- Firms produce quantity Q₁.
- They sell the output at price P₁.
- Costs are at the level C₁ (Y).
- Firms earn supernormal profits as AR is greater than AC.
- Inefficiency occurs as costs are not at the minimum point of the AC curve.

(iii)

Explain two changes in market conditions (characteristics) which allows a market to move from a Monopoly to an Oligopoly.

2 x 3

8

- **Number of firms in the market**: in a monopoly there is only one firm. In an oligopoly there are more firms and a small number of firms (may dominate the industry).
- The firms aim is to maximise profit in a monopoly. A firm in oligopoly may
 have aims other than profit maximisation i.e., avoiding government
 interference, discouraging the entry of new firms etc.
- **Product differentiation exists in oligopoly** as firms spend a lot to convince consumers their product/service is superior. Firms tend not to compete on price to avoid a price war. In monopoly none of this is necessary.

By 2030, there will be an estimated 500,000 electric vehicles on Irish roads with (c) proposals already in place to ban the sale of non-zero emission vehicles. Adapted from www.esbnetworks.ie 2 x 4 (2+2)Outline two challenges which the Irish economy faces in transforming the Irish (i) motor industry into a carbon neutral industry. • Prohibitive cost of electric cars. One deterrent for consumers in their decision to purchase electric vehicles is that comparable sized petrol/diesel cars are often more competitively priced. • The range the EV has before it must be charged. One worry which potential electric vehicle consumers point toward is that the range of a fully charged electric engine is much shorter than a fully filled petrol/diesel engine. • Provision of charging facilities/high set-up cost/large capital expenditure. In order for this scheme to be successful the government needs to engage in large scale capital investment to provide charging facilities for the electric vehicles. • Opportunity cost of expenditure on charging facilities. The government will need to perform a cost-benefit-analysis as there will be an opportunity cost to this government expenditure. These funds may have been used in other areas. • Adequate provision of electricity supply. The threat of electricity blackouts continues to be a risk. Currently data centres put a strain on electricity supply in Ireland. If the electricity supply is currently under this much strain it begs the question of where additional capacity is going to come from to fuel these cars. • Public buy-in. In order for the public to switch to EVs it will require the Irish government / the motor industry to convince the population to accept the need to switch to EVs. If consumers don't gradually transition to electric vehicles the plan will fail.

Discuss one reason why the Irish government **should grant planning permission** to additional data centres in Ireland and one reason why the government **should not grant planning permission**.

4 (2+2)

Reasons for granting planning permission:

(ii)

- Supports technological industry in Ireland. Ireland has become increasingly technologically advanced in recent years. Continued growth and development in these areas is essential to sustainable economic growth in Ireland.
- Supports employment in the tech industry/STEM. STEM jobs represent on third of the Irish job market. Allowing additional development within this industry will continue to provide additional jobs for people in this sector.
- Source of government revenue. Data centres are in huge demand and thus highly profitable. The Irish government stands to benefit from additional taxes on earnings from these companies and their employees.
- Investment is an injection into the circular flow of income. Additional investment into the circular flow of income should be encouraged as it may have a multiplier effect, leading to further growth in the economy.
- May encourage further FDI. Some MNCs may consider locating in Ireland if they see a growth in the availability of these data centres here.

4 (2+2)

Reasons against granting planning permission:

- **Electricity supply under pressure in Ireland**. With the risk of rolling blackouts due to electricity shortages in 2021 there is a question as to whether Ireland has the resources to cope with another large drain on electricity.
- Opportunity cost of land and other resources used by data centres. The more land that is used up by data centres the less land there will be available for other uses thus increasing its price.
- Repatriation of earnings by foreign firms. The data centres are foreign owned companies and thus it is likely that their profits will be repatriated back to their country of origin. Thus, whilst their production will contribute to our GDP it won't add to our GNP.

	Question 13					
	Possible responses	Max Mar				
(a)	The infographic below shows the sources of income and expenditure as a proportion of every euro the Irish government receives and spends in 2020.					
	An Phríomh-Oifig Statistics Office Government Income & Expenditure 2020					
	Sources of Income (per euro) Areas of Expenditure (per euro)					
	Taxes 74c 19c 24c 14c Services 14c Capital Assets 9c Other Income 2c Services Services Services 2c 4c Capital Assets 9c					
	www.cso.ie					
(i)	Using the infographic above, explain why social benefits represent such a high proportion of government expenditure. Use an example of a social benefit to support your answer.					
	Social protection is a large part of government expenditure because:					
	 It is part of the governments objectives to redistribute income from his income earners to low-income earners in the Irish economy. More people within that state rely on government supports to buy the goods/services which are necessary to survive. Increasingly the government sees a greater role for them in dealing with the difficulties for citizens who must rely on the market economy. Covid 19 caused a lockdown in March 2020. The government introduction schemes such as PUP, EWSS, TWSS etc which increased spending on so benefits. 					
	Example:	4				
	 Payments such as unemployment benefit help to reduce income inequality in Ireland and ensure a certain minimum standard of living. 	4				
ii)	The Irish government uses both direct and indirect tax to raise government revenue. Distinguish between these two types of taxes. Use examples of each to support your answer.					
	Direct taxes are taxes placed upon income and wealth. e.g., P.A.Y.E. and capital gains tax.					

(b) Governments can use incentives to encourage certain human behaviour and the tax system to discourage certain human behaviour. (i) Outline one possible incentive the government uses to encourage certain human behaviour and one possible tax measure to discourage certain human behaviour. Give an example to support your answer in each case. **Encourages**: 7 **Provision of a grant towards the purchase of electric vehicles –** may (4+3)encourage people to switch to EVs and reduce carbo emissions. Provision of grants for retrofitting houses / installation of solar panels may mean improved long-term sustainability for house owners. Reduction in VAT rate on businesses in the hospitality sector - may encourage increased consumption of their services leading to sustainable development / increased employment. • Funding of REPS scheme – may help protect the rural environment by encouraging increased participation. Discourages: 7 (4+3) Plastic bag tax – the Imposition of the plastic bag tax discouraged their use; encourage the use of long-life bags, thereby reducing waste of resources. **Higher taxes on demerit goods** – the impositions of high excise duties on cigarettes. • Fines for motoring offences – the imposition of graded fines may discourage certain risky behaviour in driving resulting is reduced accidents / loss of life. • Cycle to work scheme – this scheme aims to encourage workers to cycle to and from work. Limits apply. Payment can be arranged through deduction from wages over a specified time period. 2 x 6 (ii) Outline two interventions, other than incentives/taxes, that a government could (3+3)consider implementing to influence consumer behaviour. Minimum prices such as the minimum unit price on alcohol may act as a deterrent for consumers to purchase those products as they are now more expensive. • Advertising campaigns may help to overcome a situation of information failure to influence consumers to purchase the product e.g., Bord Bia or not to purchase the product e.g. cigarettes. • Restrictions on advertising may take the limelight away from certain product which the government would like to see reduced consumption of e.g., prohibiting advertising of fast foods within a certain radius of schools. • Educational programmes in schools may help citizens to make more informed decisions about how to be ethical and sustainable citizens and consumers. • Packaging and labelling of product can offer additional information to consumers to make them more aware of the dangers associated with the product i.e., warnings on alcohol that consumption has health implications.

Maximum prices may occur in a market where the government thinks that market equilibrium price is exploitative to consumers. Lowering the price

may encourage more demand e.g. rent controls.

- The Irish Government has signed up to the Organisation for Economic Co-operation and Developments (OECD) plan to reform global tax rules. The reforms will mean firms in Ireland that have an annual revenue of €750 million or more will be **charged corporation tax at the rate of 15%,** all other companies will be charged at the rate of 12.5%.

 Adapted from rte.ie
- (i) Outline the possible economic effects of this measure for the Irish economy.

2 x 8 (4 + 4)

- Larger tax take for the Irish government. With the highest earning firms being charged a higher rate of tax on their profits this will result in a higher tax take for the department of the exchequer provided it does not result in some firms re-locating.
- More equitable as the highest earners pay more. This additional tax rate creates a more progressive tax system. As the earnings increase so too does the percentage of tax take.
- Less repatriated earnings from large firms. Many of the highest earning firms operating in Ireland are foreign firms. By increasing the tax rate more of the income they earn in Ireland will stay in Ireland and help to benefit the Irish people.
- Supports infant/indigenous industries in Ireland. By only increasing the tax rate on those firms earning in excess of €750 million per year it is only the largest and most established firms which will actually feel the burden of the tax. Thus, this tax should not be a deterrent to new start-ups or punitive to infant industries.
- May discourage FDI in Ireland/some firms may leave. One of the negative
 consequences of this increased tax is that some established firms may decide
 to move to a more cost-effective location. This could have an adverse effect
 on employment.
- Better relationships with trade partners. There has been increasing pressure
 in recent years to undertake adaptations to our taxation policies, most
 notably from the EU and USA. Through partially acquiescing to their
 requests, it should help to improve our international relationships. Ireland
 will no longer be viewed as a tax haven.

Should the Irish Government impose the new 15% corporation tax rate on **all firms** in Ireland regardless of their annual turnover (including firms with annual turnover of less than €750 million)? Yes / No. Justify your answer.

8 (4+4)

For implementation:

(ii)

- **Greater tax revenue for Irish government.** If all firms were charged a higher rate on their profits it would lead to a higher tax take for the Irish government allowing for provision of better state services.
- More stability in the tax revenue collected. The government could rely on a more consistent flow of revenue as the tax revenue collected form MNCs is volatile.
- A fairer taxation system. If more tax revenue is collected form corporation tax, then maybe the government could change rates of income tax; VAT; excise duties making the tax system fairer for the majority of taxpayers.

Against implementation:

- **Infant industries**. New start-up firms are more vulnerable to economic shocks. If they have less profits left due to a higher tax rate it may make them even more vulnerable.
- **Deterrent to investment**. This higher tax may discourage new firms from starting up as they see this higher tax as an extra cost.
- **Inequitable**. This could be viewed as a regressive step as it would take a higher proportion from firms with lower incomes.
- Indigenous firms don't have as many assets to pool. Larger and more
 established firms can spread their costs across a wider range of output and a
 larger pool of assets, and this may ensure that the tax burden won't be as
 difficult for them to bear.

	Question 14						
	Possible responses						
(a)	The cost of building a house has risen by 30% in 2021. Everything has gone up by a staggering rate, from the price of a bag of cement, to the timber on the roof, to the teel. The cost of building a house in late 2021 was €70,000 more than was originally budgeted.			Mark			
		Adapted from rte.ie					
(i)	Explain the term cost pus	plain the term cost push inflation with reference to the statement above.					
	Cost push inflation refers to increases in the average price of goods and services caused by increases in the cost of production of the finished goods / where increases in cost of production is passed onto the consumer in the form of higher prices.						
	In the above example as the cost of housing raw materials e.g., cement and timber have all increased, leading to increases in the prices of houses across the country.						
(ii)	Choose by means of a tick (✓) which type of cost best describes each of the following Explain your choice.						
	Building Expense	Fixed Cost	Variable Cost	Explanation			
	Bags of Cement		✓	As more output, houses, are produced more of the raw material, cement, will be needed. As output increases, so does the cost of production, therefore it is a variable cost.	(2+4)		
	Carpenters (Labour)		✓	As more output, houses, are produced more of labour is needed to produce them. As output increases, so does the cost of production, therefore it is a variable cost. Note:	(2+4)		
	Purchase price of a construction site	√		Maybe a FC if it is part of a fixed price contract. Regardless of whether more or less houses are produced the purchase of the site will still need to be paid for. Whether the site contains 1 house or 100 houses its cost remains the same. As output increases, the site cost remains the same, therefore it is	(2+4)		

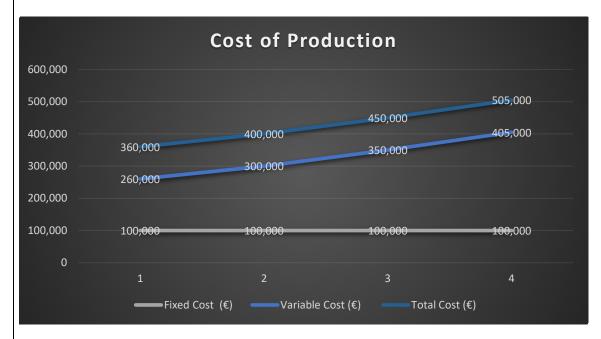
- (b) The figures below represent the costs of building an average 3-bedroom semi-detached house in rural Ireland.

 Adapted from scsi.ie
- (i) Calculate the missing figures for A, B, and C in the table.

Calculations:

A: Total Cost	B: Average Variable Cost	C: Marginal Cost		
100,000	400,000	450,000		
+ 260,000	2	- 400,000		
€360,000	€200,000	€50,000		

(ii) Using the figures obtained in the table draw and label: the Fixed Costs, Variable Costs, and Total Costs on the graph paper below.



Axes 4

(iii) If the firm earns €55,000 for an additional unit of output produced, how many houses should it produce? Explain your answer.

5

9

TC:5

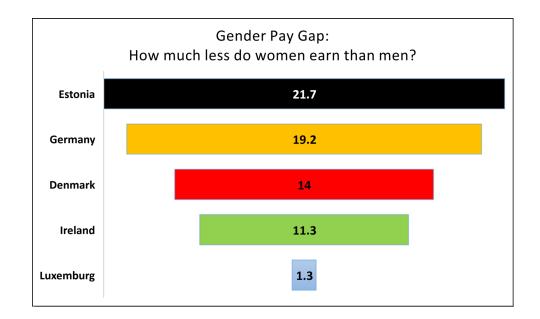
VC:5

FC: 2

The firm should produce 4 houses.

At unit 4 the marginal cost of production is €55,000. The profit maximisation rules state that a firm should produce where **marginal cost is equal to marginal revenue**. The extra cost of producing the 4th house equals the extra revenue received from the sale of the house.

(c)



Based upon the data above calculate the **average** gender wage gap across these five European countries. Show all your workings.

$$21.7 + 19.2 + 14 + 11.3 + 1.3 = 67.5 \div 5 = 13.5$$

8

(ii)

Explain **one** reason why a gender pay gap persists in many European countries

(2+3)

- **Discrimination in the workplace:** women and men may not be paid the same wages even though they do the same work due to illegal discrimination in the workplace.
- Lack of enforcement by EU agencies: state agencies do not enforce the existing legislation or may not take legal action against offenders.
- Balancing work and family responsibilities: some women work shorter hours and often part-time to combine family responsibilities and paid work. Career progression can be interrupted by maternity leave.
- 'Glass ceiling'/fewer women in senior and leadership positions: women are underrepresented in most senior positions, in politics and in certain sectors within the economy such as on boards of management.
- Different jobs, different sectors: women and men carry out different jobs and
 often work in different sectors. In health and social work women make up 80%
 of workers.
- Undervaluing of women's work and skills: women's skills and competencies are
 often undervalued, especially in occupations where they are in the majority. This
 is reflected in lower rates of pay.
- **Gender role of women / tradition:** some people may still consider that a woman's role in society is to stay in the home and rear children and this may still cause rates to be lower in some societies.

(iii)

Discuss **one** argument for and **one** argument against the implementation of the 'Living Wage' €12.90 per hour as the National Minimum Wage for 2023.

Arguments for:

4 (2+2)

Introduce a more equitable distribution of income.

People who were on lower levels of pay will now receive a higher minimum level of pay and this helps to re-distribute wealth within a country.

Protection of the most vulnerable under law.

Workers who may be vulnerable are now better protected by law from exploitation by unfair employers.

Reduce problem of poverty.

An increased minimum wage will ensure that wages from paid work will result in a living wage and this will help reduce poverty within the country.

Increase worker's standard of living.

By providing for an increased minimum wage workers disposable income increases and their standard of living increases.

Increase the incentive to work.

When workers see that pay levels are rising then it may attract more people into the workforce / help retain current workers / help increase productivity.

Boost economic growth.

Higher incomes will mean increased spending within the economy and will help boost economic growth / employment.

Arguments against:

4 (2+2)

Increases the cost of business.

Businesses and unions may argue against the implementation of the Living Wage as it would lead to an increase in their cost of production which may make it harder for businesses to survive.

Cost push inflation.

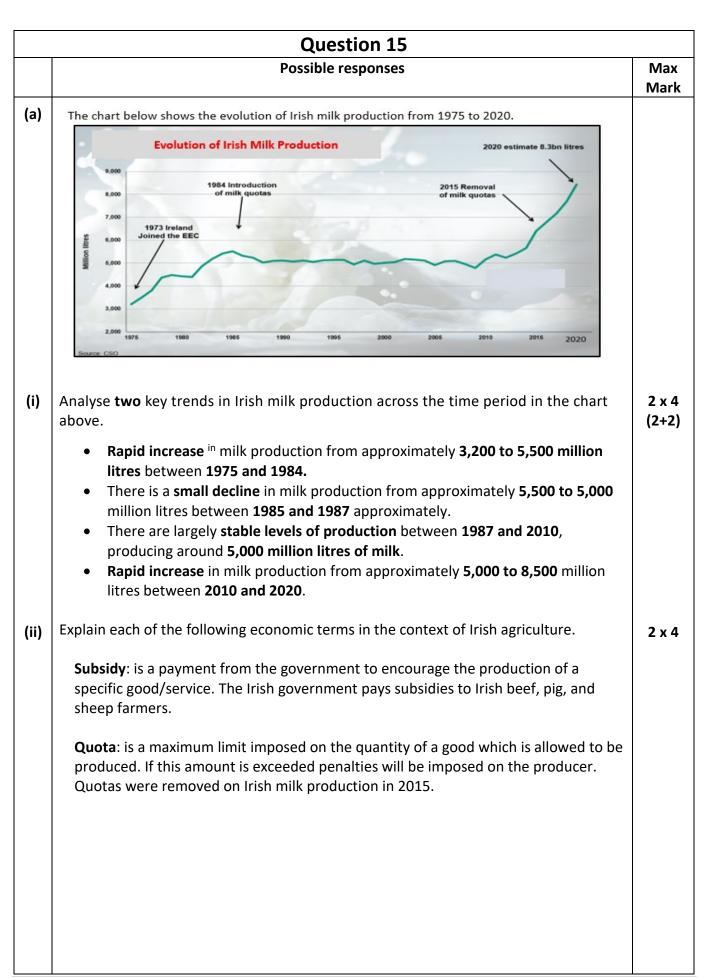
Increasing the minimum wage up to the Living Wage may lead to increased cost of production which may be passed on to the consumer in the form of higher prices.

May lead to decreased employment.

Whilst more employees may be willing to work, leading to an expanded labour force, firms may decide to counteract the increasing costs through rationalisation of their workforce. This may leave fewer people employed than before the Living Wage was implemented.

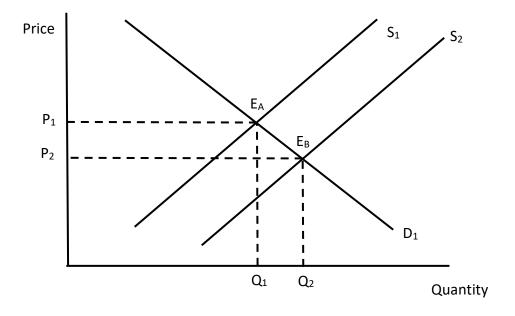
May be a deterrent for FDI.

Firms who have invested into Ireland from abroad may find the increase in the cost of production to be a deterrent to operating here. Existing firms may decide to relocate to other low-cost countries. New firms might not consider Ireland as an option for FDI.



(iii) Grant aid of €395m was provided to Irish farmers to improve and/or build a specific range of farm buildings or purchase equipment that may benefit their farm business e.g. milking machines. Adapted from www. agriland.ie

Explain, with the use of a fully labelled diagram below, how this grant aid will have impacted on the equilibrium price and quantity of milk.



• This grant should help reduce costs &/or become more efficient.

- This causes the supply curve to shift to the right from S₁ to S₂.
- The equilibrium price decreases (from P₁ to P₂).
- The quantity supplied increases (from Q₁ to Q₂).

9

5

The graph below shows the Euro (€) to Pound Sterling (£) exchange rates.

December 2012 – December 2021



Adapted from ecb.europa.eu

Identify one period where the value of the Euro depreciates against the Pound Sterling. Explain your answer.

4 + 4

During the period **December 2013 to December 2015.**

This can be seen as the amount of Sterling which can be bought per Euro declines from 0.80 pence to 0.70 pence approximately.

OR

(i)

(b)

During the period December 2018 to December 2019.

This can be seen as the amount of Sterling which can be bought per Euro declines from 0.90 pence to 0.85 pence approximately.

OR

During the period December 2020 to December 2021.

This can be seen as the amount of Sterling which can be bought per Euro declines from 0.90 pence to 0.85 pence approximately.

Apart from the change in exchange rates between the two currencies, outline two other impacts Brexit has had on the trade relationship between the UK and Ireland.

2 x 7 (4 + 3)

Possible negative effect on Irish exports.

Approximately 15 per cent of Irish goods and services exports are destined to the UK. In certain sectors, the UK is an especially important market, such as the agri-food sector where around 40 per cent of exports are destined for the UK. Supplier industries to the export sectors will also be affected. In addition, two-thirds of Irish exporters make use of the UK land bridge to access continental markets, and this could pose problems for Irish exporters who wish to avoid UK ferry ports.

Effects on agricultural sector / agri-food sectors / marine industries.

Brexit will reduce the preferential access of EU producers to the UK market and thereby reduce the cost advantages that Irish agricultural products have in the UK market relative to similar products, e.g. dairy products from New Zealand or beef from Australia. Impacts in the agri-food sector are driven by a combination of tariffs, customs costs, and the risk of regulatory divergence. The Irish Fishing industry may also fare badly from Brexit due to restrictions.

Labour market effects.

The effects on the labour market will be determined by the demand for Irish exports in the UK market. Some export sectors are likely to face reduced demand from the UK and thus experience falls in employment levels. However, if foreign companies relocate from the UK to Ireland for access to the EU market this could give rise to employment in some sectors.

Imports from the UK.

The cost of imports from the UK may increase due to tariffs, customs costs, administrative barriers etc. Cost of raw materials may also rise leading to a rise in prices for domestically produced goods. There may also be a disruption to supply chains as Irish firms seek alternatives to UK suppliers leading to rising prices or potential shortages. Irish consumers may also switch their online shopping from UK sites to EU

Relocation of U.K. based firms.

Some firms exiting the U.K. due to the difficulties Brexit has presented to their business may decide to set up in Ireland to benefit from EU access.

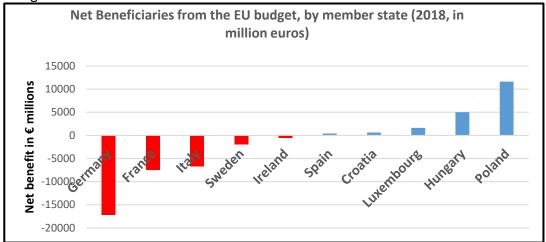
Instability in Northern Ireland.

There have been some more fractious and tense moments in Northern Ireland in recent years as the question of how it should operate within the island of Ireland, the U.K. and the E.U. has been a difficult one to navigate.

- (iii) Explain how a knowledge of price elasticity of demand (PED) might be helpful to Irish exporters who wish to maximise their total revenue in the UK market.
 - A knowledge of Price Elasticity of Demand is useful to exporters as they will know that where the demand for their product is most elastic (with response to changes in the price of their product) they can choose how best to change their prices.
 - If the product has a **more elastic response** to price changes in the foreign market, **a lower price will be charged.**
 - If the product has a **less elastic response** to price changes in the foreign market, a **higher price will be charged**.

6

(c) The graph below shows the countries which were net beneficiaries from the EU Budget in 2018.



(i) Using the data in the graph above, name the country which is the EU's largest contributor and which country is the EU's largest beneficiary.

Largest EU Contributor: GERMANYLargest EU Beneficiary: POLAND

(ii)

Justify why countries which are Net Contributors to the EU, despite the financial cost to the country of membership, still decide to remain members of the EU.

2 x 5 (2+3)

4 + 3

• Free Trade Area / larger market / trade expansion/ improved balance of payments

Being a member of the EU allows EU members access to an increased market size of over 500 million people. These customers can be exported to tariff free. EU members also benefit from the collective agreements that the EU negotiates with other countries outside the EU. Trade is also made easier within the EU with the removal of barriers / firms can bid for public sector contracts within the EU.

Access to capital / research funding

EU members have received specific funding which may help them achieve specific infrastructural targets. Even if overall the countries are net contributors, the funding they have received may have helped them to achieve goals which were unachievable for the country by themselves at that moment in time such as improvement in infrastructure; retraining grants; Erasmus funding with around 50,000 students from Ireland participating in Erasmus since 1987. As part of the European Research Area EU members can both participate in and benefit from global research and development.

Freedom movement of capital / labour

EU members have the freedom to live and work in any other member state without the requirement for a visa. Membership allows access to increased study / job opportunities. Irish citizens choosing to work or study abroad can have their Irish qualifications recognised throughout the EU, under the European Qualifications Framework. Also allows access to EU capital markets.

Foreign Direct Investment / job creation

Being an EU member is an incentive for firms outside this area to invest. If foreign firms can base their operations inside the EU, they can access the benefits of EU membership. This FDI is a mutually beneficial relationship as the country benefits from additional investment, employment and tax revenue.

• EU legislation and policies

EU member states are protected by the policies and arrangements which the EU has agreed with all other EU member states and external countries such as the CAP and the Fisheries Policy. Workers and consumers are protected by EU legislation such as the European Health Insurance Card.

• Supports the Peace Process in Europe

One of the EU's foundational concepts was to support peace within Europe. Having seen the destruction which WWI and WWII inflicted upon Europe and the World, an area of economic and political cooperation was seen as essential to avoiding similar conflicts in the future.

	Question 16			
	Possible responses	Max Mark		
(a)	Rent increases in so-called rent pressure zones (RPZs) are to be capped in line with inflation, and a ban on evictions has been put in place for the rest of the year (2021) under new laws set to be introduced by the Government. Adapted from The Irish Times			
(i)	 What are the likely impacts of this government intervention on social sustainability? Reduced homelessness. Restrictions on prices and elimination of the risk of eviction should help to curb the risk of homelessness for a significant number of Irish people. Improved standard of living. If citizens are required to spend less of their income on paying high rents, then they can afford to spend more on other goods and services thereby improving their standard of living. Reduced inequality. Through introducing these measures, the government will hope to narrow the gap between the rich and the poor and make life more liveable for the most vulnerable members of society. Increased ability to save for a mortgage. If there is reduced pressure on rents it may afford renters more of an opportunity to save additional income which can be put towards a down payment on a house. Greater security for the economically vulnerable. Those citizens who have experienced significant pressure from an economic perspective during the global pandemic will welcome these measures as it may allow them more breathing space and an opportunity to better plan for the future. 	1 x 8 1 x 4		

- (ii) Other than rent caps, suggest two other government interventions which could help reduce inequality in accessing the Irish housing market.
- 1 x 8 1 x 4
- Improved access to social housing. If the government can help to provide more social housing it will help to protect more of Ireland's most economically vulnerable people. It may also help to relieve some of the pressure on the wider housing market.
- Improvements in the Help to Buy scheme e.g. increase above €30,000 or allow to be used on second-hand properties. If the requirements and rewards within the HTB scheme are amended to better reflect the needs of first-time buyers in Irish housing market, it may help to reduce inequality.
- Reduction in mortgage lending requirement for low-income earners. If the ECB/Central bank reduces the required deposit or adjusts the stringency of other requirements it may increase the number of people who gain access to the housing market.
- Increases in the minimum wage. If the minimum wage is increased, it will give greater scope to low-income earners to save additional earnings which can be put towards a deposit for a house.
- Tax breaks for low-income earners other than those offered in the Help to Buy scheme
- **Empty home tax**. If an empty home tax is introduced, it will act as a disincentive for landlords to leave their properties empty for long periods of time. This may encourage some of these homeowners to sell these properties which would increase the supply of houses in the market.
- **Derelict building incentives**. If the government provides incentives for upgrading derelict buildings across the country, it will help to recover a lot of buildings which were lost in the 'Great Recession'.
- (b) The UN Secretary-General said the Working Group's report for sustainability was a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable.

Adapted from rte.ie

- (i) Outline the importance of environmental sustainability for the future of our economy.
 - Threat to human life without mitigating measures environmental damage creates a threat to human life.
 - **Future generations** the environment is a natural resource and needs to be protected for future generations.
 - **Standard of living** unless the current trends of environmental damage can be reduced the standard of living of people, now and in the future, will disimprove.
 - **Production methods** unless immediate changes are made to current environmentally damaging production methods then these methods may be forced to come to an end.

/ (4+3) (ii) Suggest **strategies** that could be employed by the Irish government and Irish citizens to aid with the transition to a low carbon economy.

Government:

1 x 7 (4+3)

- Increased incentives to purchase electric cars. If the government can provide incentives, financial or otherwise, to Irish citizens to make the switch to electric vehicles it may increase the uptake of these vehicles in Ireland.
- Increased environmental audits of production methods of Irish firms. If the
 department of the environment is more stringent in its review of how firms do
 business in Ireland it may deter firms from producing in environmentally
 harmful ways.
- Increased penalties for firms which have a negative environmental impact.
 Firms which produce in environmentally harmful ways could be hit with large financial penalties by the government.
- Tax breaks for firms which produce in environmentally friendly production methods. This financial incentive may be enough to encourage a firm to amend their production practices.
- Increased funding for research and development in green areas. The government could help support university initiatives across Ireland to try and help plan for a green future.
- Increased funding for educational programmes for the youth. Increased funding for educational programs for the youth may help to prepare the next generation on how to approach this crisis.
- Improve infrastructure for electric vehicles. If the government provides more charging points for electric vehicles it will better allow Irish motorists to transition to less environmentally harmful vehicles.

Citizens:

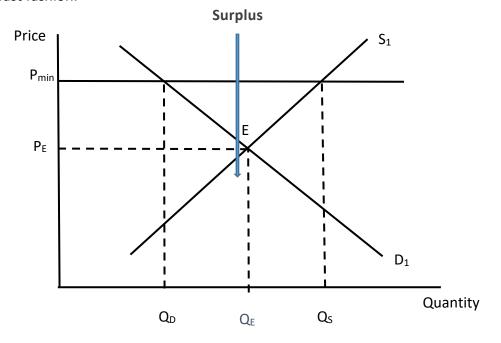
1 x 7 (4+3)

- More ethically aware consumption of goods. If consumers are more particular about the products they purchase and are more aware of the production processes involved in producing these products, they can become an active part of reducing carbon consumption in Ireland.
- Concerted efforts to reduce consumption of goods which are harmful to the
 environment. Some consumers are happy to consume products regardless of
 their environmental impact. If this pattern can be changed it will speed up this
 process. E.g. swapping to electric vehicles.
- Increase efforts to recycle products. Efforts to make the life of a product longer and keep it out of landfill help to reduce carbon emissions into the environment. Recent trends such as upcycling have been helpful on this front.

(c) The fashion industry produces 10% of all humanity's carbon emissions. It is the second largest consumer of the world's water supply and pollutes the oceans. 85% of all textiles go to landfill each year. Research shows that people are buying more clothes now than ever but are only keeping them for half as long.

Adapted from www.businessinsider.com

(i) Explain, with the use of a fully labelled diagram, how the introduction of minimum pricing (above the market equilibrium price) on fast fashion will impact on the market for fast fashion.



Effect on price

Through imposing a minimum price on these products, the price will be legally forced upwards from P_E to P_{min} .

Effect on demand

With the increase in price there will be a fall in demand for these products from Q_E to Q_D .

Effect on market

This will result in a surplus of fast fashion clothes as indicated above.

10

5

(ii) Outline two steps **consumers** in Ireland can take to reduce the effects of the fast fashion industry.

2 x 5 (2+3)

The Irish Consumer:

- Ethical consumption of goods/Research the product. The onus is at least partially on the consumer to ensure that they are making their best effort to purchase products which are not exploitative of workers or the environment.
- Concerted effort to recycle old clothes. The decision by consumers to discard clothes, especially consumers who frequently discard clothes, is what generates such large amounts of waste in landfills through the world. At the very least consumers need to make an effort to recycle clothes.
- Reduction of unnecessary purchases. A large part of the problem is that people purchase far more clothes than they actually need for daily life. If consumers can reduce this pattern can help close the cycle of fast fashion.

(iii) Outline one step **businesses** in Ireland can take to reduce the effects of the fast fashion industry.

5 (2+3)

Businesses:

- Alterations to production methods. Through ensuring that high quality
 materials are used in an ethical and environmentally friendly production process
 it may extend the life of clothing. It may also better reward the production
 employees.
- Ethical sourcing of raw materials. Fast fashion is often exploitative in how it sources its materials and how it pays the employees on the production line. If firms did more thorough work on eliminating these practices, it can help reduce the effects of fast fashion.
- Transparency in production methods. Firms can help make their production process clear to consumers through online explication. This has become popular in the food industry e.g. "farm to table"
- Actively engage in the recycling process of clothes sold by the business. Firms can offer a free recycling service to its consumers to help reduce the amount of their clothes which needlessly end up in landfill.
- **Encourage consumers to update their clothes**: some firms may offer a facility for consumers to return their 'old' clothes for repair / refinement.

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

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