

Higher Level Economics

MARKING SCHEME

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NOTES

(for use with the Marking Scheme)

- There is no suggestion that the enclosed notes are exhaustive or definitively complete.
- Further relevant points presented by candidates will be marked and rewarded on their merits.
- 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.

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Section A-100 Marks

1. State **THREE** economic uses for a census of population in Ireland.
 1. Demographic changes:
It provides information on demographic changes both nationally and on a regional basis.
 2. Infrastructural requirements:
It helps the economy plan for future infrastructural requirements.
 3. Planning and the Provision of Essential services:
It indicates if additional investment in services is required i.e. health, education etc.
 4. Regional policy:
The government may be prompted to change/develop regional policy if some counties experience depopulation.
 5. Pension planning:
It can influence the provision of pension funds.
 6. Future levels of consumer demand: Producers can predict more accurately future demand.
 7. Labour market:
The data can be used to predict and make provision for future labour requirements.
 8. Profiling of the population:
The population can be profiled by age, gender, nationality; place of residence, marital status, number of children, religion, ethnic background etc.

16 marks graded

2. State three reasons why **profits** are important in a **market economy**.
 1. Encourages risk taking: Profits are a pre-requisite for undertaking risks.
 2. Indicates the best use of resources / consumer demand:
Profits indicate what goods and services consumers demand.
 3. Encourages investment: profits may encourage entrepreneurs to invest further in ventures.
 4. Provides funds for expansion: Existing business expansion or diversification.
 5. Continuity of production: If normal profit is not earned production ceases.
 6. SNPs reward entrepreneurs' innovations:
Those firms which are most efficient / or which minimise costs may earn SNPs.
 7. Source of revenue for the government:
Government earns tax revenues for the benefit of citizens.
 8. SNP's may promote Mergers / Takeovers:
Existing profitable firms may be taken over by multinationals.

16 marks graded

3. A firm wishes to attract more labour. In order to increase its labour force from 5 to 6 employees, the firm must increase the weekly wage rate from €400 to €440 per employee. Calculate the firm's **marginal cost of labour**. Show your workings.

$5 \times €400 = €2,000$ $6 \times €440 = \underline{€2,640}$ Marginal Cost of labour = $\underline{€ 640}$	$€40 \times 6 = €240$ $\underline{\quad\quad\quad} + €400$ Marginal Cost of labour = $\underline{€ 640}$
16 marks graded	16 marks graded

4. Define **economic development**. State **TWO** policies by which governments of developed countries could promote economic development in less developed countries (LDCs).

An increase in the level of income / standard of living / output / GNP per person in a country which is accompanied by a **change in the structure** of society.

TWO policies by which governments could promote economic development in LDCs

1. **Assist foreign aid programmes.**

Governments can continue with aid to help in emergency situations.

They can also provide more long term aid to help with the development of infrastructure/provision of education, health programmes etc.

2. **Restructure national debts.**

If the respective national debts were cancelled then these funds would become available for the country to use for developments.

3. **Improve trading opportunities.**

Improve access to markets in the developed world – provide outlet for their exports.

Improve the terms of trade available – provide higher prices for their exports.

4. **Encourage multinationals to set up firms there.**

These could provide the workers with skills. The (fair) wages received could help boost domestic demand and provide tax revenue for the state.

5. **Assist LDC's with available technologies.**

The provision of simple technologies to the LDCs could help improve standards of living; increase productive capacity.

6. **Assist peace measures and promote political stability.**

Economic development requires a peaceful environment. Foreign countries could provide peacekeeping troops and encourage political stability.

16 marks graded.

5. Define **internal economies of scale**. State **TWO** examples.

These are forces within a firm which cause the average / unit costs of that firm to decline as the firm grows in size.

Examples

1. Increased use of specialised machinery/equipment resulting in lower unit costs.
2. Labour economies / specialisation of workers:
Dividing a job into distinct components may result in lower unit costs.
3. Construction economies: Larger plants cost less per cubic metre to construct than smaller ones.
4. Purchasing economies: Larger discounts are received from bulk purchasing.
5. Economies in distribution: Bulk deliveries result in a lower unit cost of transport.
6. Financial economies: Bigger firms may avail of more competitive rates of interest.
7. Managerial economies:
As a firm grows its management costs may not grow at the same rate as the firm grows.
8. Production Process economies:
A large firm may be able to run one process into the next without costly discontinuities.
9. Indivisibility problems reduced: Expansion may allow for continuous production.
10. Marketing economies: Firms may experience saving in the costs of advertising.
11. Reduction in Waste: Large firms, with more lines of production, may reduce waste costs / less wastage of materials.

16 marks graded.

6. In equilibrium a consumer buys 8 bars of chocolate at €1.00 each and 12 sandwiches at €4.00 each. The marginal utility of the eighth bar of chocolate is 10 utils. Using the Equi-Marginal Principle of Consumer Behaviour - calculate the marginal utility of the twelfth sandwich. Show all your workings.

$$\frac{\text{Marginal Utility of Chocolate}}{\text{Price of Chocolate}} = \frac{\text{Marginal Utility of Sandwiches}}{\text{Price of Sandwiches}}$$

$$\frac{10 *}{€1.00 * } = \frac{MU_s}{€4.00 * } \quad \text{so} \quad MU_s = \boxed{40 \text{ utils}}$$

17 marks graded

7. Define price discrimination.

State **TWO** conditions under which it would be possible for a firm to price discriminate.

When goods or services are sold to different consumers in different markets at varying ratios between marginal cost and price/ the price difference is not due to difference in the cost of production.

1. Monopoly Power.

If freedom of entry existed into the industry, competitors would enter where the firm was charging the higher price and earning SNP and this would continue until only normal profit was earned.

2. Separation of markets.

This ensures that the good bought in the low priced market cannot be offered for resale in the higher priced market. If it was not possible to separate the markets then the above would occur until no price difference existed.

3. Different consumer elasticities of demand.

Consumers with the greater price elasticity of demand are charged the lower prices for their goods e.g. students are assumed to have lower incomes and so are not in the position to pay the full price for certain goods and services.

4. Consumer Indifference.

The difference in price may be so small that consumers are indifferent and so don't mind paying the slightly higher price.

5. Lack of awareness by consumers.

Consumers may be unaware that the good is available elsewhere at a lower price.

6. Consumer attitudes to the goods.

A consumer may be willing to pay a higher price for a good which they consider to be in fashion / provide status e.g. young people and their desire for 'branded' products.

17 marks graded.

8. State TWO functions of the Irish National Treasury Management Agency.

1. Borrowing on behalf of the Irish Government / sale of government bonds.
2. Managing the Irish National Debt on behalf of the government.
3. Managing of the National Pension Reserve Fund.
4. Managing of other government funds such as the Social Insurance Fund and Dormant Account Fund.
5. Borrows on behalf of the Housing Finance Agency.
6. Provision of financial advice, possibly funding, and providing guarantees for all major public investment projects carried out by the National Development Finance Agency operating through the NTMA.
7. Provides a Central Treasury Service for the taking of deposits and lending to local government bodies and liquidity management for the Central Bank and Financial Services Authority of Ireland.
8. Personal injuries claims brought against Government departments and other State Authorities/ the State's Clinical Indemnity Scheme managed by the NTMA as the State Claims Agency.

17 marks graded

9. Savers who have **SSIAs** (Special Savings Investment Accounts) are being subsidised by the Irish government through the receipt of additional bonus payments.

Outline TWO economic advantages of this scheme for the Irish economy.

1. Encouraged savings in the short term:
The additional bonus payments encouraged over 1 million people to save.
2. Creates a habit for future savings in the long run:
Now that people have saved for 5 years, they may continue to save into the future.
3. Provides Funds for investment:
Financial institutions have increased funds which can be channelled into investments.
4. Reduced inflationary pressures:
Savings reduced spending thereby lessening demand- pull inflation (during the life of the scheme).
5. Increased standard of living:
When the SSIAs mature, the recipients will be able to demand more goods and services.
6. Economic Growth:
The (part) spending of the SSIAs will help boost economic growth.
7. Provision for Pensions:
Some recipients may switch their SSIAs into providing funds for their retirement pensions.
8. Tax revenues for government:
Increased spending (particularly on luxury items) will lead to increased tax revenues for the state

Outline TWO economic disadvantages of this scheme for the Irish economy.

1. Opportunity costs of these bonus payments for government / savers:
The government / individuals could have used the funds for other purposes.
2. Inequitable: Only those people who could afford to do so availed of the scheme while the money being used by the government to make the bonus payments comes from general taxpayers.
3. Inflation when the SSIAs mature:
Spending of the SSIAs will cause inflationary pressures within the economy.
4. Property prices:
SSIAs used as deposits for house purchases will further fuel inflation in house prices.
5. Imports: Spending of the SSIAs on imports may lead to Balance of Payments difficulties.
6. Difficulty of meeting expectations / demand:
With the increase in demand for goods and services producers/suppliers may not be able to meet this demand e.g. builders and house renovations.

17 marks graded.

Question 1 – Consumer Behaviour and Elasticity

- (a) For analytical purposes economists make certain assumptions about consumer behaviour. State and explain these **FOUR** principal assumptions.

(15 marks)

1. The consumer has a limited income.

The consumer's income is not large enough to satisfy his/her needs and wants, therefore the consumer must choose between those goods he wishes to buy.

2. The consumer aims to get maximum satisfaction / utility from that income.

A consumer will spend his/her limited income in such a way that he/she will achieve the most satisfaction / best value for money.

He will obey the Equi-Marginal Principle of Consumer Behaviour.

3. The consumer acts rationally.

The consumer acts in that manner consistent with his preferences. If the person sees an identical commodity priced differently in two adjoining shops they will buy it at the lower price.

4. The consumer is subject to the law of diminishing marginal utility.

As a consumer consumes additional units of a good his/her marginal utility for this good will eventually decline.

(4+4+4+3 graded)

- (b) A manufacturer of three different products calculates the price elasticity of demand for each product as follows:

Product X: - 1.5

Product Y: -1.0

Product Z: -0.3

The company wishes to maximise its revenues. Explain in respect of **each** of these products, what change, if any, the company should make in the prices currently being charged to enable it achieve its aim. (30 marks)

	Product X: - 1.5	Product Y: -1.0	Product Z: -0.3
Type of Elasticity	Elastic because PED > 1	Unit Elastic Because PED = 1	Inelastic because PED < 1
Price Change	Decrease price	Leave price unchanged	Increase price
Comparison	Because: the % ↑ in demand exceeds the % ↓ in price	Because: the % Δ in demand equals the % Δ in price	Because: the % ↑ in price exceeds the % ↓ in demand
Effect on Total Revenue	This will increase	Will remain unchanged	This will increase
	10 marks graded	10 marks graded	10 marks graded

- (c) A consumer buys 10 units of Good A when the price of Good B is €5.
When the price of Good B rises to €6 (the price of Good A remaining unchanged) the consumer buys 14 units of A.
- Define **cross elasticity of demand**.
 - Using an appropriate formula, calculate this consumer's cross elasticity of demand for Good A. Show workings.
 - Is Good A a substitute for, or complement to, Good B? Explain your choice. (30 marks)

(i) **Cross Elasticity measures**

The percentage / proportionate change in the demand for one good, caused by the percentage / proportionate change in the price of other goods. **10 marks graded**

(ii)

$\frac{\Delta Q_A}{\Delta P_B} \times \frac{P_{B1} + P_{B2}}{Q_{A1} + Q_{A2}}$	$\frac{\Delta Q_A}{\frac{1}{2}(Q_{A1} + Q_{A2})} \div \frac{\Delta P_B}{\frac{1}{2}(P_{B1} + P_{B2})}$
$\frac{+4}{+1} \times \frac{5+6}{10+14} \quad \begin{matrix} (44) \\ (24) \end{matrix}$	$\frac{+4}{\frac{1}{2}(10+14)} \div \frac{+1}{\frac{1}{2}(5+6)}$
+ 1.83	+ 1.83
15 marks graded	

(iii) Good A is a **substitute** good:

It has a + sign. This means that as the price of Good B increased the consumer switched from Good B to the cheaper alternative, Good A.

5 marks

Question 2 – Oligopoly

(a) State and explain **THREE** key features of an oligopolistic market.

(15 marks)

1. Few Sellers in the industry.

Because of this each seller can influence the price of the commodity/or the output sold.

2. Interdependence between firms.

Firms in oligopoly do not act independently of each other. They will each take into the account the likely reactions of their competitors. Hence **prices tend to be rigid**.

3. Product Differentiation occurs.

The commodities which firms sell are close substitutes. Firms will engage in advertising to persuade consumers to buy their product rather than a competitor's product.

4. Barriers to entry.

These are common in an oligopolistic market as existing firms will wish to maintain their share of the market. Examples of barriers include: high costs of setting up in the industry, brand proliferation etc.

5. Collusion may occur.

Firms within the industry may meet to control the output in the industry and/or control prices e.g. OPEC.

6. Non-price competition is more common than price competition.

Due to the fear of how their competitors will react firms tend not to engage in price competition but rather they engage in non-price competitive measures to gain consumers.

7. Pursuing objectives other than profit maximisation.

Firms may have objectives other than maximizing their profits i.e. increasing their share of the total market, limiting profits to discourage government investigation, satisfaction with the existing level of profits (e.g. in a small family business)

*3 features x 5 marks each = 15 marks graded
Must state TWO of the first THREE listed features.*

(b) With the aid of **ONE** clearly labelled diagram:

- (i) Explain the shape of the 'kinked demand curve' under oligopoly.
- (ii) Explain the long run equilibrium position of a firm facing a 'kinked demand curve'.
- (iii) Explain what is meant by the term 'rigidity of prices' under a 'kinked demand curve'. (35 marks)

Marking scheme: Diagram – 9 marks graded

(i) Shape of the demand curve: **8 marks graded**

- **This firm faces an ELASTIC D/C - demand curve AB** If a firm increases its price other firms leave their prices unchanged - so this firm will lose many customers.
- **The firm faces an INELASTIC D/C - demand curve XY** If a firm lowers its price other firms will match this price decrease - the firm will gain few additional customers.

(ii) the long run equilibrium position of this firm:

10 marks graded

- Equilibrium is achieved where (a) $MC = MR$ & (b) MC is rising.
- This occurs at point G in the diagram.
- The firm will produce Q_1 and sell this output at price P_1
- Reference to unchanging prices: should costs rise between points D and E then market price tends to remain constant at P_1 .
- Reference to profits: as barriers to entry may exist, this firm can earn SNPs if AR exceeds AC.

(iii) Explain what is meant by the term ‘rigidity of prices’ under a ‘kinked demand curve’

8 marks graded

- This occurs when prices tend not to change when costs change in an oligopolist Industry.
- This is because firms are fearful of the likely reaction of their competitors should they change prices.
- Between points D & E as MR is constant, if MC changes prices tend not to change.

- (c) (i) Explain **THREE** types of collusion which may occur in an oligopolistic market.
(ii) Do you believe that the Irish retail market for banking services (e.g. personal current accounts) operates under oligopolistic conditions? Explain your answer. (25 marks)

(i)

1. Pricing Policy / Limit Pricing

One firm, with the tacit agreement of others, could reduce prices forcing unwanted entrants out of the industry.

2. Production/output policy

Firms could join together to limit output to certain agreed amounts.

3. Sales Territories.

Firms could divide up the markets between them and agree not to compete in each other's market segments.

4. Refusal to supply firms.

Firms may not supply those firms who buy from firms not in the cartel.

5. Implicit Collusion

Each firm recognises that behaving as if they were branches of a single firm their joint profits would be higher. So firms do not provoke their rivals by cutting prices. Instead they try to increase market share by engaging in non-price competitive measures.

3 forms of collusion at 5 marks each graded.

- (ii) Do you believe that the Irish retail market for market for banking services (e.g. personal current accounts) operates under oligopolistic conditions? Explain your answer. (25 marks)

The retail market for personal banking services in Ireland operates under oligopolistic conditions because:

1. Few Sellers.

There are relatively few banks providing personal services within the market e.g. AIB, Bank of Ireland etc. Even with the entry of new banks these two dominate the market.

2. Interdependence between firms.

The banks do not act independently of each other. They closely take into the account the likely reactions of their competitors to any changes they may make.

3. Close substitutes.

The services provided are very close substitutes. There is competitive advertising and heavy 'product loyalty' promotion. Various gimmicks are used to attract customers.

2 reasons at 5 marks each graded.

Q3 Capital, Investment and Keynes

(a) Distinguish between the following terms, using relevant examples in **each** case:

- (i) Fixed Capital and Social Capital;
- (ii) Savings and Investment;
- (iii) Capital Widening and Capital Deepening.

(25 marks)

	Fixed Capital	Social Capital
<i>Explanation</i>	The stock of fixed assets 2 marks	The assets/wealth owned by the community/society in general 2 marks
<i>Example</i>	<i>Plant, Equipment, Tools</i> 2 marks	<i>Hospitals, Parks, Roads</i> 2 marks
	Savings	Investment
<i>Explanation</i>	Owners of capital who receive interest. The decision to save is made by individuals. Income not spent 3 marks	Users of capital who pay interest. The decision to invest is made by producers/firms. Production of capital goods / Additions to capital stock 2 marks
<i>Example</i>	<i>Income €100 less Spending of €80 means Savings = €20</i> 2 marks	<i>Purchase of new machinery by a firm</i> 2 marks
	Capital Widening	Capital Deepening
<i>Explanation</i>	The amount of capital per worker remains unchanged. An increase in the capital stock, which leave the capital/labour ratio unchanged. 2 marks	The amount of capital increases resulting in more capital per worker in the economy. 2 marks
<i>Example</i>	<i>Period 1: 4 machines & 4 men Period 2: 8 machines & 8 men</i> 2 marks	<i>Period 1: 4 machines and 4 men Period 2: 12 machines and 8 men</i> 2 marks

(b) State and explain **FIVE** factors affecting the level of investment in the Irish economy.

(25 marks)

1. Rates of interest / Cost of borrowing

The higher the rate of interest - the higher the cost of borrowing – the lower the profit earned. Hence investment will fall / MEC may fall.

2. Business people's expectations about the economic future.

If business people are optimistic about the economy or their sector they are more likely to invest. Currently Irish business people are more optimistic about the future for various reasons: lower tax rates in Ireland; good industrial relations climate; low interest rates; rising economic growth etc.

3. The cost of capital goods.

The greater the cost of capital goods the lower the profitability of the investment, hence investment tends to fall.

4. Government policies.

If government policy is favourable towards investment then investment will tend to rise. Examples of favourable policies include: attractive state grants; reduction in corporation tax ; development of infrastructure etc.

5. The international economic climate.

Ireland is an open economy, which relies on foreign investment. If the international economic climate is booming then this may result in a growth in demand, benefiting Irish business.

6. Irish Labour market.

- Due to the existence of the partnership model, Ireland has a relatively peaceful industrial climate. This ensures uninterrupted production and is helpful to increasing investment.
- The availability of an educated / skilled workforce may continue to attract high ‘value-added’ type firms to Ireland.

7. The Marginal Efficiency of Capital.

The greater the potential MEC for any possible investment project then the more likely that that investment will take place.

5 factors at 5 marks each graded

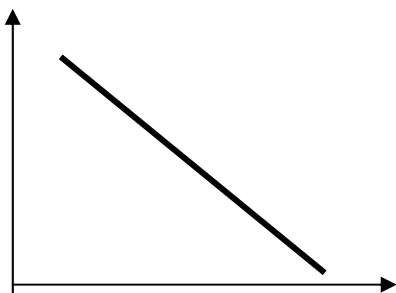
- (c) (i) State and explain Keynes's **THREE** motives for holding money: **15 marks graded.**

Transactionary	Precautionary	Speculative
Money demanded for day-to-day expenses	Money demanded for emergencies e.g. illness, house repairs.	Money demanded for any possible profitable investment opportunity

- (ii) Explain, with the aid of a diagram, Keynes's theory on the relationship between the holding of money and the rate of interest.

10 marks graded

Motive	Rate of Interest
Transactionary	The demand for money for transactionary reasons is not affected by the rate of interest.
Precautionary	The demand for money for precautionary reasons is affected slightly (negatively) by the rate of interest.
Speculative	The demand for money for speculative reasons is greatly affected (negatively) by the rate of interest.



- When the rate of interest is low, the opportunity cost (of the interest foregone) is low, so people prefer to hold money.
- When the rate of interest is high, the opportunity cost is high – as it is now more costly to hold money – so now less money is held.

Q4 National Income

- (a) (i) Explain what is meant by the term '**National Income**'.
- (ii) In Ireland at present, would you expect **GNP** to be greater than, equal to, or less than, **GDP**?
Explain your answer. (20 marks)

- (i) National Income

The income accruing to the permanent residents of a country from current economic activity, during a specified period which is usually one year.

9 marks graded

- (ii) In Ireland at present, would you expect **GNP** to be greater than, equal to, or less than, **GDP**?
Explain your answer

- **GNP is less than** GDP at the moment, because
- **Net Factor Income** from the Rest of the World is **negative**.
This is due to:
- the repatriation of profits by companies resident in Ireland
- the repayments on the foreign element of our National debt.
- the remittances of immigrants in Ireland sent abroad

11 marks graded

- (b) (i) Explain what is meant by the term 'the multiplier'.
- (ii) State the formula by which the multiplier is measured in an open economy.
- (iii) Explain the variable elements in the formula.
- (iv) It has been estimated that in the Irish economy: $MPM = 0.4$, $MPT = 0.24$, $MPS = 0.26$.
Calculate the value of the multiplier in the Irish economy. Show your workings. (30 marks)

- (i) Explain what is meant by the term 'the multiplier'

The multiplier shows the precise relationship between an initial injection into the circular flow of income and the eventual total increase in national income resulting from the injection.

8 marks graded

- (ii) State the formula by which the multiplier is measured in an open economy.

$$\text{Formula : } \frac{1}{MPS+MPM} \quad \text{or} \quad \frac{1}{1 - (MPC-MPM)}$$

4 marks

(iii) Explain the variable elements in the formula.

MPC – Marginal Propensity to Consume

- This is the proportion of each additional unit of income which is spent.

MPM – Marginal Propensity to Import

- This is the proportion of each additional unit of income which is spent in imports.

MPS – Marginal Propensity to Save

- This is the proportion of each additional unit of income which is saved.

2 terms at 4 marks each graded = 8 marks

(iv) It has been estimated that in the Irish economy: MPM = 0.4, MPT = 0.24, MPS = 0.26.
Calculate the value of the multiplier in the Irish economy. Show your workings.

$$\text{MPC} = 1 - \text{MPS} = 1 - 0.26 = 0.74$$

$$\frac{1}{1 - (\text{MPC} - \text{MPM} - \text{MPT})} = \frac{1}{1 - (0.74 - 0.4 - 0.24)} = \frac{1}{0.9} = \mathbf{1.1}$$

or

$$\frac{1}{\text{MPS} + \text{MPM} + \text{MPT}} = \frac{1}{0.26 + 0.4 + 0.24} = \frac{1}{0.9} = \mathbf{1.11}$$

10 marks graded

(c) Gross National Product at Current Market Prices of the year 2005 in Ireland was approximately 45% higher than the figure for the year 2000.

State and explain the relevance of FOUR other pieces of economic information which you would use to assess whether or not the average standard of living has also risen by approximately 45% between 2000 and 2005. (25 marks)

1. Population changes

If GNP grows at a slower rate than population, then GNP per head decreases and the average standard of living will fall.

2. Inflation

An increase in prices will automatically increase GNP at current market prices. So it is better to consider GNP at constant market prices.

3. Employment / Unemployment

If a person is unemployed rising GNP per head will not necessarily mean that this person's average standard of living is rising.

4. Levels of taxation

When considering a person's standard of living one should take into account rates of income tax and levels of indirect tax within the country. An increase in either of these may result in a drop in a person's standard of living.

5. Levels of social welfare

For a person who is unemployed the rates of social welfare payable is of more relevance than the average standard of living in the country.

6. Measures flow of wealth not welfare

Rising GNP may be accompanied by changing working or living conditions which may cause a loss of welfare e.g. traffic congestion.

7. Hidden social costs attached to increases in GNP

If a firm increases output GNP increases. However, a hidden cost may be increased pollution etc.

8. Distribution of GNP

General living standards depend on its distribution. If increases in GNP make their way into the pockets of a small minority, there may be no improvement in the standard of living of the whole community.

9. Exclusion of important activities from calculation of GNP

The black economy is excluded from the calculation of national income.

The work of housewives and much of the work of voluntary activities is also excluded. Such activities are most important to the welfare of its citizens.

10. Nature of the goods produced

A country which spends a small amount on military equipment and a large amount on health, education etc. will have a better standard of living than one where the reverse is the case i.e. much of its wealth on armaments.

11. Government services at cost price.

Government services are included at cost while private services are provided at selling price. A country where the government provides many services will record a lower GDP.

Marking Scheme: 4 points at 6 + 6 + 6 + 7 marks graded.

Q5 Adam Smith, Budget Surplus and Taxation

- (a) Among Adam Smith's contributions to economic thought, were his **Canons of Taxation**.
 (i) State and explain Adam Smith's **FOUR** Canons of Taxation.
 (ii) Do you consider that these Canons are useful for analysing the taxation system in Ireland today? Justify (25)

(i) Canons of Taxation

Canon	Explanation
Equity	Takes a higher proportion of income in tax as income rises. or The ability of each person to pay the tax must be taken into account.
Economy	The revenue collected should exceed the costs of collection. The costs of tax collection should be small relative to the yield.
Certainty	The amount paid should be certain and clear/not arbitrary.
Convenience	The tax should be collected in a way and at a time which suits the taxpayer / the method and timing of the tax should suit the taxpayer.

16 marks: 4 canons at 4 marks each graded.

- (ii) Do you consider that these Canons are useful for analysing the taxation system in Ireland? **YES – 1 mark**

Canon		
Equity	With PAYE, people on higher incomes pay a greater proportion in tax. One of the accepted functions of taxation is the redistribution of wealth, which is an argument for equity.	Highlights that indirect taxes are regressive as a taxpayers' ability to pay is not taken into account.
Economy	If a tax does not collect more than the cost of administering the tax is should not be introduced. This is one of the advantages of direct taxes.	One of the arguments against indirect taxation is the complexity of the collection system.
Certainty	The main advantage of direct taxes is that the amount to be collected is clear to the state, thereby helping financial planning.	A difficulty of administering indirect taxes is that the amount to be collected is unclear and makes planning by the state difficult.
Convenience	This is one of the justifications for the PAYE system of income tax, where the tax is deducted at source from income. VAT is paid at the time of purchase.	If the method of paying and the timing of the tax does not suit the taxpayer is can lead to evasion.

2 reasons at 4 marks each graded.

Candidates must analyse the Irish Taxation system with reference to the Canons.

Or

The candidates could argue: **NO – 1 mark** and argue as follows:

Besides these canons there are other key principles which could be considered for analysing the taxation system.

Is it possible to evade the tax?

None of the canons help us measure the level of tax evasion, which in Ireland has been a problem.

Does the tax cause a disincentive to work / save or invest?: Should the taxation system cause any of the above then this is a serious difficulty for promoting economic growth.

2 reasons at 4 marks each graded.

- (b) Outline possible positive **and** negative economic consequences of a Government Current Budget Surplus.
(25 marks)

Positive	Negative
<p><u>1.Reduced inflationary pressures.</u> The government is withdrawing more money from the economy than it is putting in. This tends to have a deflationary effect in the economy.</p>	<p><u>1. Rise in conflicting expectations.</u> When citizens observe the budget surplus they may demand improvements in state services e.g. health services; education provision etc. However, the demands/expectations made on the government may conflict.</p>
<p><u>2.Managing our finances.</u> The existence of a budget surplus means that government does not have difficulty in controlling its finances. This can lead to confidence in the economy and attract investment.</p>	<p><u>2. Public Sector Workers.</u> When public sector workers see this budget surplus they may see it as an opportunity for wage negotiations. Workers may thus demand pay increases and /or an increase in the level of the workforce.</p>
<p><u>3.Adhering to EU guidelines.</u> The fact that a budget surplus exists indicates that the country is meeting the EU agreed guidelines without any difficulty. This alleviates the need for the EU to comment adversely on government economic policy.</p>	<p><u>3. Tax reductions.</u> Taxpayers who feel that they are paying too much tax may feel aggrieved. They may demand reductions in their tax / improved equity in the tax system.</p>
<p><u>4.Scope for taxation reforms.</u> The fact that a surplus exists indicates that scope exists for reform in the taxation system in the country. This should allow for improvements in the tax system allowing people to retain more of their income e.g. widened tax bands etc.</p>	<p><u>4. Discontinuity in Social Partnership.</u> The existence of the budget surplus may cause discontent within society. Citizens may feel that certain sectors are benefiting more from government policies. May prove difficult in approving national agreements.</p>
<p><u>5.Uses of this increased govt. revenue.</u> With increased revenue flowing into the government, they now have the ability to make use of this additional revenue. They may use for current projects e.g. services or on long term projects e.g. infrastructure.</p>	<p><u>5. Government financial planning.</u> The surplus may indicate that the planning by the government was not sufficiently accurate at budget preparation time.</p>
	<p><u>6. Opportunity costs of a surplus.</u> The budget surplus may have been achieved by the reduction of expenditure on services within the country. Thus essential services such as health, education etc may have deteriorated.</p>

Marking Scheme: 5 points at 5 marks each graded.

Must contain a minimum of two positive and two negative consequences.

- (c) You are the economic advisor to the Minister for Finance. The Minister is considering raising tax revenue through indirect taxation. Discuss the economic advantages and disadvantages of such a policy. (25 marks)

Economic Advantages	Economic Disadvantages
<p><u>Evasion is more difficult.</u> As the indirect tax is included in the selling price of the good or service it is impossible to evade.</p>	<p><u>Will increase inflation.</u> Indirect taxes raise the prices of goods and services and hence the cost of living, possibly causing demands for further wage increases.</p>
<p><u>No disincentive to work.</u> A taxpayer can adjust their expenditure patterns to reduce their tax liability and thus it does not act as a disincentive to work as with direct taxes.</p>	<p><u>Regressive / Inequitable</u> Lower income groups may end up paying a greater proportion of their income in this form of tax because they spend a greater proportion of their income on necessities.</p>
<p><u>Convenient for taxpayer.</u> They are included in the selling price and paid when the good/service is bought. As the tax is hidden it is easier to impose than direct tax.</p>	<p><u>Revenue collected is not as certain.</u> The revenue to be collected is not as predictable as that from direct taxation. This may hinder the government's financial planning.</p>
<p><u>Used by government to change consumption patterns.</u> The government could increase the tax on those commodities which it deems harmful to the public i.e. cigarettes, alcohol. The introduction of the plastic bag tax has reduced their demand.</p>	<p><u>Burden of collection passed to retailers/traders.</u> These now act as revenue collectors and procedures must be put into practice to collect, record and remit the revenue, increasing the costs for the firms.</p>
<p><u>Economic.</u> The cost of collection is borne by retailers and producers not by the state.</p>	
<p><u>Acts as a built in stabiliser.</u> As the economy expands spending rises and so too will the revenue collected from taxation.</p>	

**5 points at 5 marks each graded.
Minimum of 2 advantages / 2 disadvantages required.**

Q6 Trade and Multinational Companies

- (a) (i) Explain why international trade is essential for the Irish economy.
(ii) Has Ireland, in recent years, tended to have a surplus or a deficit on the Balance of Payments Current Account? Outline the economic consequences of this situation. (30 marks)

- (i) Explain why international trade is essential for the Irish economy

1. Greater standard of living / increased wealth

Trade increases wealth / GNP and this allows the purchase of a greater quantity of goods and services.

2. Greater choice of commodities / Commodities we are unable to produce.

Trade allows us benefit from a greater variety of goods and services, than would be available without trade. We lack some essential raw materials for production and thus must import these.

3. More competitive prices of goods and services.

Trade results in greater competition on the market which should lead to more competitive prices for consumers.

4. Employment / Investment opportunities.

Efficient production means that employment in these industries is more secure. Employment will be created in those industries which are expanding due to the benefits of trade.

A healthy trading economy generates confidence in the economy and investment is thus encouraged.

5. Companies benefit from economies of large scale production

With trade specialisation will take place. Companies will increase production and may benefit from economies of scale. These savings may be passed onto consumers in the form of lower prices and/or greater innovation.

6. Allows for the sale of surplus/ excess domestic output.

If a company is competitive then it has the opportunity to sell that output which it doesn't/can't sell domestically on the international market. The Irish domestic market is small.

7. More efficient use of scarce world resources.

By specialising in production countries maximise their combined outputs and thus resources are allocated more efficiently, resulting in less wastage.

Marking scheme: 20 marks
4 points at 5 marks each graded.

- (ii) Has Ireland, in recent years, tended to have a surplus or a deficit on the Balance of Payments Current Account? Outline the economic consequences of this situation.

Ireland's Balance of Payments has a **Deficit** balance.

4 marks

Economic consequences of a Balance of Payments Deficit

1) Income leakage from the economy.

As imports are a leakage from the circular flow of income the multiplier is reduced in size and so national income falls.

2) Reduction in our external reserves.

If our external reserves are used to finance this deficit then we reduce our ability to make international payments.

3) Increased foreign borrowing

If borrowing is used to finance this deficit our national debt will increase placing a greater burden on taxpayers.

4) Job losses

If imports are bought in preference to domestically produced goods it may result in job losses in those domestic industries forced to rationalise.

2 points at 3 marks each graded.

- (b) State and explain how **imports** into the Euro-zone would be affected by each of the following developments:
- (i) the US dollar **rises** in value against the euro.
 - (ii) employment within the Euro-zone **increases**. (20 marks)

Effects on imports into euro-zone countries

	Statement	Explanation
US dollar rises in value against the euro	Imports will Decrease	<u>Imports from the US are now more expensive</u> hence imports from the US may fall
10 marks graded		
Employment within euro zone countries increases	Imports will Increase	With higher incomes, euro zone citizens can now afford to buy more goods and services As employment increases demand for capital goods and raw materials will increase and this may result in greater imports.
10 marks graded		

- (c) Ireland has attracted many multinational companies to establish operations in recent years. There has also been a trend for some of these companies to relocate to eastern Europe or Asia.
- (i) Outline reasons why multinational companies locate in Ireland.
 - (ii) Outline possible reasons for the current relocation to other regions. (25 marks)

(i) Outline reasons why multinational companies locate in Ireland.

1. Availability of a skilled/English speaking workforce.

Firms have available a large, highly educated and multi-skilled workforce.

This helps reduce the training costs for these firms. An English speaking workforce is a major attraction for foreign firms.

2. Low rates of taxation.

The rate of corporation profits tax in Ireland is one of the lowest within the EU.

3. Access to EU market / Member of the euro currency.

Firms which locate in Ireland have access to free movement of their goods within the EU.

Ireland is a member of the euro and this makes payment for international transactions within the eurozone much easier and hence more attractive.

4. Availability of state incentives.

Firms can avail of attractive grants and other incentives provided by the state.

Examples include: advance factories; serviced industrial estates; contribution towards training costs; grants towards research and development etc.

5. Good industrial relations.

Social partnerships have resulted in relative industrial peace offering firms uninterrupted production.

6. Attractive rates of return on investments.

Firms locate here because the rate of return on their investment is sufficiently more attractive than is available elsewhere.

7. High rate of economic growth.

The rate of economic growth in Ireland is one of the highest within the EU and this has led to confidence amongst investors, who see Ireland as an attractive market for their goods.

9. Stable economic climate.

By international standards Ireland's economy is performing exceptionally well. This has increased business confidence which encourages firms to locate here.

15 Marks: 3 points at 5 marks each graded.

- (ii) Outline possible reasons for the current relocation to other regions.

1. Lower wage costs outside Ireland.

- Businesses have stated that labour costs in Ireland are prohibitive and cite the introduction of the minimum wage rate, the existence of social partnership etc. as factors that have led to these higher wage costs.
- Labour costs in Eastern Europe and Asia are more competitive.

2. Rising costs of Production.

- Many firms have voiced concerns about increasing costs such as insurance, refuse charges, energy costs, the high costs of available land for expansion and development etc.
- These costs increases make our exports less competitive.

3. Infrastructural problems.

- Ireland faces many problems with infrastructure. Examples include transport difficulties; lack of affordable housing etc. Workers now face very high costs for buying a home resulting in higher wage demands by workers.

4. Assesment of new EU member states.

- Since May 2004 ten new countries joined the EU and these countries now offer companies access to the EU market; availability of cheaper labour; room to expand etc., hence they have become an attractive location for mobile industry.

5. Regulatory Framework.

- Actions by the central government, local government or the EU have placed further requirements on industry. These actions impose a stricter regulatory framework for firms to operate.
- By moving to Eastern Europe and Asia regulations may be less strict making it easier to operate e.g. protection of the environment may face less protection.

6. Advances in International Communication

- Advancements in global communications have made it possible for service firms to locate to places which were not options in the past and still carry out their business. They can now do so at lower unit costs and thereby increase their profits. An example of businesses which have re-located are international call centres i.e. credit card companies.

**Marking Scheme: 10 marks
2 points at 5 marks each graded.**

Q7 Consumer Price Index, Inflation and International Banking Organisations

(a) (i) What economic uses are made of a Consumer Price Index?

12 marks graded

1) **Measures the Rate of Inflation.**

Changes in the CPI from one month to the next gives us the official prevailing rate of inflation.

2) **Measures International Competitiveness.**

By comparing our inflation rate with that of our trading partners we can determine whether our competitiveness on international markets is improving or disimproving.

3) **Used in Partnership Agreements negotiations.**

Trade unions use any increase in the CPI as the basis for their wage claim increases.

4) **Indicator of economic performance.**

The CPI, together with statistics on employment, economic growth, exchequer returns etc., provide an indicator of the country's economic performance.

5) **Indexation of savings / investments.**

Some savings schemes have 'index-linked' returns meaning that the rate of interest will be equal to the rate of inflation. Individuals with insurance / pension policies may be able to increase their contributions so as to maintain the real value of these policies.

6) **Used by government indexing tax bands / social welfare payments.**

The government may use increases in the CPI to index tax bands so that taxpayers are not paying more tax. Similarly, the government may use increases in the CPI to increase rates of social welfare so as to maintain the standard of living of the recipients.

(ii) Explain how a **Consumer Price Index** is constructed

13 marks graded

1. **Based on the 'National Average Family Shopping Basket'**

Those items which the average Irish family buys frequently and in large quantities are included.

2. **Expenditure patterns divided into various categories**

The CPI contains various categories of expenditure: food, alcohol, tobacco, clothing & footwear, fuel & light, housing, durable and non-durable household goods, transport, services and miscellaneous items etc.

3. **Calculation of 'Weight' (Household Budget Inquiry)**

The weight is the fraction of income which is spent on each category of expenditure and this information is obtained by means of the Household Budget Inquiry (random sample of all private households in the state).

4. **Prices in Base Year determined**

The average cost of the above items is taken to equal 100.

5. **Prices in Current Year determined**

The current prices of each item are collected from a fixed panel of retail and service outlets in various locations throughout the country.

(b) The economic effects on the Irish economy of a significant increase in the annual rate of price inflation. (25)

1. Lower standard of living

Because of the higher cost of living, people have reduced purchasing power which causes a reduction in their standard of living.

2. Increased wage demands

Workers, suffering from a reduction in their standard of living, will try to negotiate wage increases to compensate for the higher cost of living.

3. Loss of competitiveness

If inflation is higher in Ireland than with our trading partners it will result in a loss of competitiveness for our exports abroad. Irish exports may be priced out of foreign markets.

4. Loss of employment

Employers, faced with increased wage demands and a possible loss of exports may be forced to reduce costs and reduce the numbers employed.

5. Government Finances

With higher prices the government may collect increased indirect tax revenues.

6. Savings discouraged

If the inflation rate is greater than the (nominal) rates of interest offered on savings, the real rate of interest available to savers falls thereby discouraging savings. Accumulated wealth is eroded by inflation.

7. Borrowing encouraged.

If the inflation rate increases the real rate of interest charged on borrowings falls and so the cost of repayments falls. This makes borrowing more attractive.

8. Increased disparity between sectors of the population.

While those at work may seek a wage increase to compensate for the drop in living standards, those on fixed incomes must wait for the government to decide to adjust their payments. This widens the gap between these sectors. The poorer sections suffer most when inflation is high.

9. Pressure on social partnership/ industrial relations unrest

Falling living standards threatens the existence of these agreements and may prevent future agreements.

10. Balance of Payments problems:

With falling volume of exports & rising volume of imports our Balance Of Payments position deteriorates. Exports become dearer and less competitive on foreign markets, while imports become more competitive on the home market.

11. Uncertainty:

Rising inflation rates in Ireland creates uncertainty for investment decisions. It makes business planning and profit calculation difficult.

Marking scheme: 25 marks: 5 points at 5 marks each graded.

(c) Outline the economic role played by TWO of the following international banking organisations. (25 marks)

The International Monetary Fund

Expansion of World Trade

The IMF encourages expansion in trade by encouraging member countries to adopt sound economic policies. It monitors economic and financial developments in member countries and gives advice to its members.

Promote exchange rate stability.

The IMF promotes international monetary co-operation. It provides a forum for consultation on international monetary problems. It tries to maintain orderly exchange arrangements among countries and aims to avoid competitive devaluations.

Orderly correction of Balance of Payments problems.

The IMF lends to member countries with Balance of Payments problems to provide temporary financing and to support reform policies aimed at correcting the underlying problems.

Operation of a multilateral system of payments.

The IMF operates this system in respect of current transactions between members and aims to eliminate foreign exchange restrictions which may hamper the growth of world trade.

Provision of technical assistance and training.

Where a member needs help the IMF will provide this assistance and training. When the Soviet Union collapsed the IMF stepped in and set up treasury systems for their central banks to help the transition from centrally planned to market based economic systems.

The World Bank

Encourage investment funds to LDCs

Obtains funds from the world's advanced countries and uses these resources to make loans available to LDCs so they can invest in roads, schools etc.

Finance capital projects in member countries.

The World Bank gives loans to member states and to private businesses in these countries so as to assist with capital projects. Examples in Ireland included in the past the building of the original community schools by the DES.

Debt relief for LDCs

The World Bank helps LDCs reduce their debt burden by extending the term of loans and /or re-negotiating interest rates.

The European Central Bank (ECB)

Maintain Price Stability.

The key aim of the ECB is to maintain price stability and this it does by closely monitoring inflation in member countries and adjusting the base ECB interest rate so as to adjust spending.

Implements EUs monetary policy.

Through its member Central Banks the ECB monitors and advises on: rates of interest, money supply, credit availability & protects the value of the euro. Main measures: Refinancing operations, Standing Facilities, Minimum Reserve Requirements.

Holds and manages the official reserves of the euro area countries.

These are the EUs official holdings of gold, foreign currencies and other reserves held as security against the issue of the euro. The ECB manages these reserves on behalf of the countries.

Financial stability and supervision

The member authorities must provide prudential supervision of credit institutions and ensure stability in the financial system.

Euro bank notes and coins

The ECB has the exclusive right to authorise the issuance of banknotes within the euro area.

Marking Scheme: 25 marks – 2 organisations at 13 marks graded and 12 marks graded.

Q8 Decentralisation, Full Employment and Infrastructure

- (a) The government announced plans to **decentralise / re-locate** many government departments and state agencies throughout the country.
 Discuss **TWO** possible economic advantages and **TWO** possible economic disadvantages of this policy for the development of the Irish economy. (20 marks)

Advantages	Disadvantages
2 at 5 marks each graded	2 at 5 marks each graded
<p><u>1. Employment Opportunities</u> Should vacancies exist in the relocated agencies then this will provide employment opportunities for the local population.</p>	<p><u>1. Increase in property prices</u> The announcement of the transfer of agencies has resulted in an increase in property prices in those areas. May make it difficult for local people to purchase houses.</p>
<p><u>2. Increased economic activity</u> The additional spending by workers / firms in these areas will, through the multiplier effect, increase economic activity in these areas, stimulating the local economy. Could halt the process of economic decline in some regions</p>	<p><u>2. Pressure on the infrastructure</u> Those areas which are accommodating the transfer of the agencies may now experience the problems experienced in the Dublin area i.e. shortage of school places, problems in A&E, traffic congestion etc.</p>
<p><u>3. Better utilisation of resources</u> With the increase in population, resources will be more fully utilised e.g. rural bus services, small national schools etc.</p>	<p><u>3. Industrial Disputes</u> Where agreement has not been reached with the workers trade unions, industrial disputes may occur resulting in a loss of services i.e. FÁS.</p>
<p><u>4. Sale of valuable land assets by state</u> The government can sell part of its valuable land banks in Dublin and use the revenues received for other projects.</p>	<p><u>4. Less effective government services</u> The dispersal of so many agencies may result in less effective decision making by government / state agencies, resulting in a poorer quality service.</p>
<p><u>5. Lower cost of living</u> With lower property prices, lower transport costs, and child minding services, the cost of living may fall.</p>	<p><u>5. Wage costs</u> If workers are reluctant to move they may be replaced by new workers, however, the existing workers will continue to be employed, possibly without specific duties as before. This will have to be funded by taxation.</p>
<p><u>6. Less congestion in Dublin / Less pressure on its infrastructure</u> Citizens in Dublin may experience less traffic congestion. With less over-crowding there may be less pressure on the local infrastructure e.g. hospitals, transport etc.</p>	

- (b) The Irish economy is currently experiencing close to **full employment**.
- (i) Explain the underlined term.
- (ii) Discuss TWO economic benefits and TWO economic difficulties of a full employment economy in Ireland today.

(25 marks)

(b) (i) Full Employment is defined as :

9 marks graded

Full employment exists when all those seeking work are working at existing wage rates.

Economic consequences of a full employment economy in Ireland today	
Economic benefits	Economic Difficulties
<p><u>1. Increased standard of living.</u> Higher incomes will allow a greater quantity of goods and services to be purchased.</p>	<p><u>1. Possible labour shortages.</u> These may occur causing difficulties for employers in meeting production targets. Need for recruitment overseas / relaxed immigration rules.</p>
<p><u>2. Increased government tax revenues.</u> With high employment the government will collect more direct and indirect tax revenue.</p>	<p><u>2. Inflationary pressures.</u> Rising incomes and spending tends to fuel inflation within the economy.</p>
<p><u>3. Reduced social welfare bill.</u> The government will be paying out less in social welfare payments.</p>	<p><u>3. Pressure on the state's infrastructure.</u> Difficulties may occur with housing, roads, child minding services , public services etc.</p>
<p><u>4. Increased aggregate demand within the economy / Economic growth</u> High employment will increase aggregate demand within the economy and this will further increase GNP.</p>	<p><u>4. Wage Demands.</u> Where shortages of labour are occurring employers may be forced to increase wage rates in order to retain their workforce.</p>
<p><u>5. Increased investment.</u> A buoyant economy encourages further investment as demand is rising, and expectations are positive about the future.</p>	<p><u>5. Deterioration / Loss of services.</u> In those sectors with low wage rates it may be difficult to attract workers and the quality of service may deteriorate or the service may discontinue.</p>

4 points at 4 marks each graded.

- (c) There has been high expenditure in recent years on developing transport and communications infrastructure in Ireland. With the use of **examples**, outline **TWO** possible social costs and **TWO** possible social benefits of these developments. (30 marks)

Outline TWO possible social benefits and TWO possible social costs of these developments.

SOCIAL BENEFITS	SOCIAL COSTS
<p><u>Enhanced social capital</u> Citizens can now avail of a better transport and communications infrastructure resulting in better quality services e.g. LUAS.</p>	<p><u>Opportunity costs of funds</u> Monies used for developing these projects could have been used for alternative purposes which may have benefited society in general. e.g. Improvements in the health services.</p>
<p><u>Reduced Traffic congestion</u> With the new roads; improved rail services etc traffic congestion in certain areas has eased e.g. any of those towns which have had by-passes constructed.</p>	<p><u>Damage to the local environment</u> The areas in which these new developments are placed may be disfigured. e.g. placing mobile phone masts near schools; construction of the new M3 motorway through the Boyne Valley etc.</p>
<p><u>Ability to attract foreign investment</u> Enhanced infrastructure should enable this country to continue to attract mobile foreign investment with resulting benefits of employment, economic growth and a better standard of living. e.g. Intel.</p>	<p><u>Increase in land prices</u> Land prices adjacent to those routes along which the new roads go may increase in price, causing difficulty to those who may wish to buy land. e.g. in those areas where new roads are planned land prices always increase resulting in higher costs.</p>
<p><u>Quicker response times in emergencies</u> With improved communications systems people are now aware in an instant of disasters – this allows agencies and individuals react to these disasters more quickly. e.g. the Tsunami relief.</p>	<p><u>Disruptions</u> The developments have caused disruption to economic, social and commercial life during the developing stages. e.g. motorway work, LUAS work in Dublin</p>
<p><u>Reduced travel times: less stress / accidents</u> Improved infrastructure makes for shorter commuting times. With less delays and hassle, stress for travellers/businesses is reduced. e.g. the introduction of the improved rail service between Dublin and Cork.</p>	
<p><u>Protection of the environment</u> A major development in transport is to encourage more people to use public transport. This will reduce the number of private cars on the roads thereby reducing fuel consumption and protecting the environment. e.g. LUAS, Development of the Dublin Metro.</p>	
<p>2 points at 8 marks each graded</p>	<p>2 points at 7 marks each graded</p>

