Coimisiún na Scrúduithe Stáit

State Examinations Commission

Scéimeanna Marcála	Scrúduithe Ardteistiméireachta, 2007
Eacnamaíocht	**Ardleibhéal**

Marking Scheme	Leaving Certificate Examination, 2007
Economics	**Higher Level**

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State Examinations Commission

LEAVING CERTIFICATE ECONOMICS

HIGHER LEVEL

MARKING SCHEME

Leaving Certificate Examination 2007

Higher Level Economics

MARKING SCHEME
&
SUPPORT NOTES
(for use with the Marking Scheme)

INDEX TO QUESTIONS

- The support notes presented here are neither exhaustive nor complete.
- Further relevant points of information 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.

Section A-100 Marks

1. State **FOUR** possible economic effects of rising **price inflation** on the Irish economy.

1 **Reduced standard of living**: due to reduced purchasing power.
2. **Increased wage demands:** workers will try to negotiate wage increases.
3. **Loss of competitiveness:** if inflation in Ireland is higher than with our trading partners / ↓exports.
4. **Loss of employment:** Employers may be forced to reduce costs and reduce the numbers employed.
5. **Government Finances:** as prices rise, the government may collect increased indirect tax revenues/ if wages do increase people may move to a higher tax rate and revenue increases.
6. **Savings discouraged:** the real rate of interest available to savers may fall, discouraging savings. **Speculation encouraged:** people may invest in property to protect the value of their investment.
7. **Borrowing encouraged:** the real rate of interest charged on borrowings falls, encouraging borrowing
8. **Increased disparity between sectors of the population**: Poorer sections suffer most when inflation increases.
9. **Pressure on social partnership/ industrial relations unrest:** trade unions may want a free for all.
10. **Balance of Payments problems:** if our volume of exports falls & volume of imports rise.
11. **Uncertainty for investment decisions makers:** business planning & profit calculation difficult.

16 marks graded.

2. State **THREE** assumptions underlying the **Law of Comparative Advantage**.

1. Transport costs do not exist.
2. The law of diminishing marginal returns (LDMR) does not apply.
3. Free trade takes place.
4. The complete mobility of labour/factors of production exists.
5. Alternative employment is available.
6. An equal distribution of benefits occurs.

16 marks graded.

3. Consumers buy 50 units of a product when the price is €1.50. When the price is reduced to €1 the consumer buys 90 units. Using an appropriate formula, calculate the consumers' PED. Show your workings and explain your answer.

$$\frac{40}{-0.50} \times \frac{1.50 + 1.00}{50 + 90} \left[\frac{2.50}{140}\right] = -\,/\,\mathbf{1.43}$$

9 marks graded.

PED is elastic. Why? Because the PED is greater than 1.
Normal good. Why? The PED is negative.

6 marks graded.

4. Firms attempting to enter a **monopoly** market must overcome barriers to entry.
Outline **THREE** such barriers to entry.

1. **Legal / Statutory / Government Monopoly:**
   Government confers the sole right to supply a good or service/ CIE.
2. **Ownership of a patent / copyright**: A firm has the sole right to a manufacturing process.
3. **Sole rights to raw materials**: Firm may have complete control over the source of raw materials
4. **Large capital investment**:
   - minimum size of a firm required to operate efficiently is so large there is no room for competitors.
   - competitors are discouraged from entering because of the high initial start-up costs.
5. **Entering Trade agreements [collusion / cartels]**:
   ensures that no competition exists within members' segments of the market.
6. **Mergers / takeovers:**
   A firm may ensure their survival by merging / taking over other (rival) firms in the same line of business, such that it becomes a monopolist and no competition exists within the industry.
7. **Brand proliferation:**
   Through advertising a firm's consumers are convinced that there is no suitable alternative to their particular brands

16 marks graded.

5. Outline **THREE** functions / responsibilities of the **European Central Bank (ECB).**

1. **Maintain Price Stability:**
   Monitor inflation in member countries and adjusts the base ECB interest rate so as to adjust spending.
2. **Implements EU's monetary policy**:
   ECB monitors and advises on: rates of interest, money supply, credit availability & protects the value of the euro.
3. **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.
4. **Financial stability and supervision:**
   The member authorities must provide prudential supervision of credit institutions and ensure stability in the financial system.
5. **Sole right to issue euro currency:**
   The ECB has exclusive right to issues euro bank notes and coins within the euro area.

16 marks graded.

6. Outline **TWO** circumstances under which a factor of production can earn **Economic Rent**.

1. **Shortage in the supply of any factor of production**: if land / labour is in short supply – its price will increase.
2. **Possession of a rare skill or talent**: if a person has a skill which is in great demand e.g. a professional soccer player then they can command high fees.
3. **Rent of Ability**: an entrepreneur who invents a much sough after commodity may command high income e.g Bill Gates and the invention of the 'windows' operating systems.
4. **Completely specific factors of production**: there is no opportunity cost in the use an existing factor of production which is completely specific (not adaptable to other uses e.g. a railway station). If a payment is made for the use of this specific factor then this entire payment would be economic rent as the opportunity cost is zero.
5. **Super normal profits earned in the short run** (will be eliminated with the entry of firms) / **long run if barriers to entry exist** e.g. in monopoly.

17 marks graded.

7. 'An Irish banking group owns thirty branch offices. There is no opportunity cost to the banking group using these offices as they are fully owned.

True / False **1 mark**

The branch offices could be sold and the money invested or
The branch offices could be rented out and an income earned.

16 marks graded.

8. Define **Social Costs**. State **TWO** significant examples currently facing the Irish economy.

Definition**:** Cost/Price which society has to pay for the existence of a particular product.

9 marks graded.

TWO significant examples**:**

1. Pollution of air/water e.g. the current water pollution in Galway.
2. Disfigurement of the landscape e.g. construction of roads disfigures the landscape.
3. Possible loss of cultural heritage e.g. the construction of M3 through Hill of Tara.
4. Traffic congestion in cities and towns with resulting problems.
5. Reduction in public amenities / urban sprawl: communities have less public spaces.
6. Global warming: increased carbon emissions affects global weather patterns.

8 marks graded.

9. Energy costs (e.g. electricity) increased significantly in Ireland during 2006.
Outline **TWO** economic reasons for the increase and **TWO** economic consequences of this specific development for the Irish economy.

TWO economic reasons for the increase:

1. **Increase in international oil prices**: caused by political instability and supply shortages.
2. **Increase in wage costs within the industry**:
   workers wage increases are passed on in the form of higher prices.
3. **Further regulation by government**:
   the addition of surcharges e.g. public service obligations levy by the ESB.
4. **Increased investment costs in the industry:**
   Firms must invest for future production.
5. To **make the company a more profitable investment** opportunity for investors.

TWO economic consequences of this specific development for the Irish economy:

Positive consequences	**Negative consequences**
1. Increased emphasis in efficiency in producing this resource. **2.** Greater awareness by consumers of the scarcity of the resources / efficient consumption. **3.** Greater investment in R&D into renewable / alternative resources. **4.** Government policy maybe re-evaluated resulting in policies which strive for better energy use. **5.** Increased government revenue through higher VAT revenues.	**1.** Inflationary pressures / decrease in the standard of living. **2.** Loss of competitiveness of Irish industry. **3.** Possible re-location of mobile industry to cheaper locations. **4.** Job losses if industry closes or re-locates.

17 marks graded.

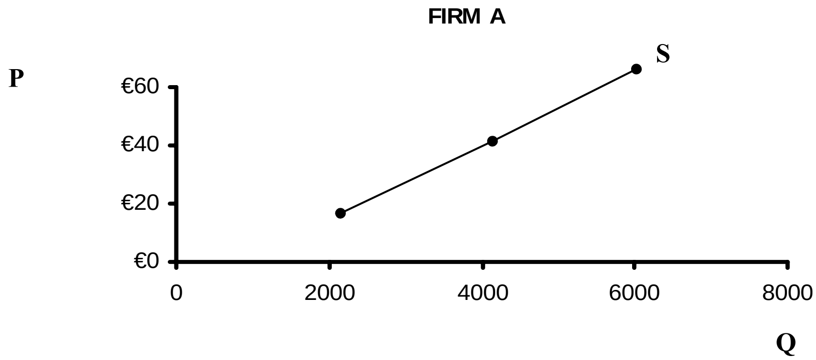
Section B-300 Marks

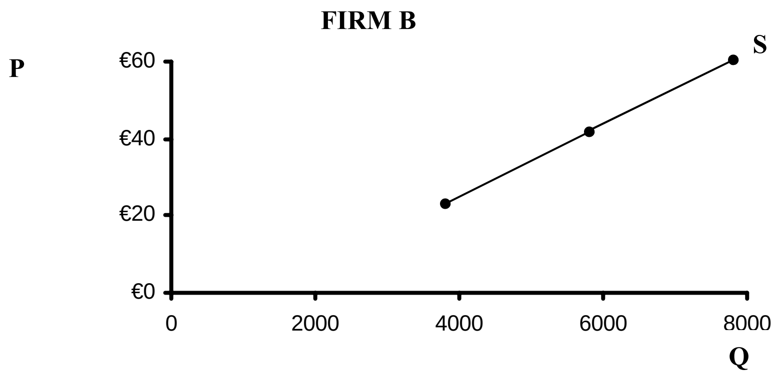
Q1 Supply

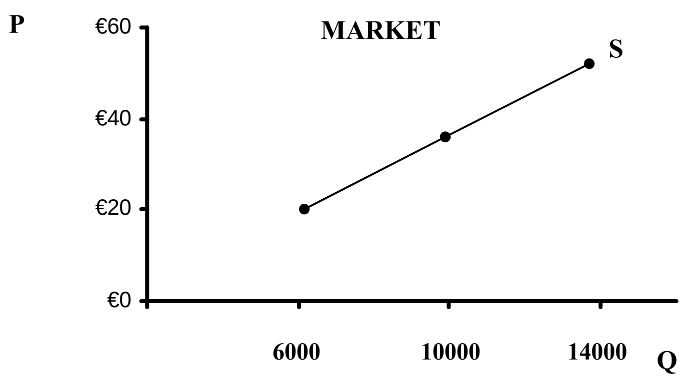
(a) (i) Define the economic terms: **individual (firm) supply; market supply**.
(ii) Explain, with the aid of labelled diagrams, the relationship between individual (firm) supply and market supply. (20 marks)

(i) **Individual supply**: the quantity of a good an individual firm is willing to supply at different prices.
Market supply: the total quantity of a good that all firms are willing to supply at different prices.

(ii)





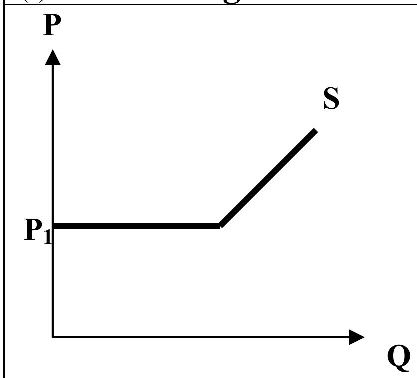
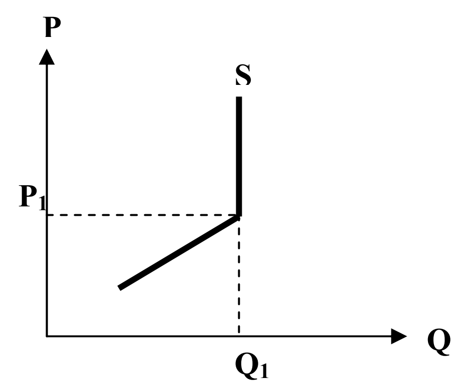
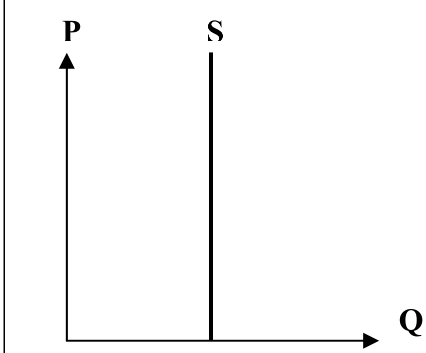


To derive the market supply we add the quantity supplied by each individual firm at each price to calculate the overall quantity supplied to the market at each price.

20 marks graded.

(b) Explain, with the aid of a labelled diagram, the supply curve of an individual firm in **each** of the following circumstances. State one example in **each** case.

(i) A firm is willing to increase supply as price rises, but there is a minimum price below which the firm will not supply at all.
(ii) A firm can supply only up to a maximum production capacity.
(iii) The product is fixed in supply (e.g. perishable good) and a firm is operating in the short run. (30 marks)

(i) **10 marks graded.**	(ii) **10 marks graded.**	(iii) **10 marks graded.**
		
• **Supply of labour**	• **ESB Power Plant** • **Mining Plant** • **Output is limited by plants productive capacity**	• **Supply of fresh fish** • **Supply of land** • **Seating capacity of a sports stadium**
• Below P_1 nothing is supplied • At prices above P_1 as price increases, quantity supplied increases.	• As price increases up to P_1 output increases up to a maximum level Q_1. • As price increases above P1 quantity supplied will not increase.	• Any change in price will not bring about any change in supply. • Entire daily supply must be sold, regardless of the prevailing price because the commodity cannot be held over for sale the following day.

(c) Outline **FOUR** factors, other than price, which affect the supply curve of an individual firm.
In each case explain how the factor affects the supply curve. (25 marks)

1. The cost of producing the product.
If there is an increase in costs of factors of production, which a firm uses in the production of their good, then it will be more costly to manufacture the good. They will not continue to supply the same quantity of the good at the old prices – there will be a reduction in the quantity supplied.

2. The state of the firm's production technology.
As new machinery is invented, as labour becomes more specialised and efficient the factors of production become more efficient. It becomes possible to increase their output even thought the payments they receive remain the same.

3. The price of related goods.
If there is an increase in the selling price of other goods, which the manufacturer could produce through using his existing factors of production, he may switch from producing the present commodity to that for which the price has increased.

4. Unplanned factors.
There may be changes in the quantity supplied, which were never intended by the producer.
Examples include agriculture – due to changes in the weather; diseases etc.
In industry there may be shortages of raw materials, strikes etc.

5. Taxation / Subsidy.

- If the government were to reduce the rates of taxation on the raw materials used in the manufacture of a commodity, this represents a reduction in the cost of production and hence quantity supplied would increase.
- If a subsidy is granted on the raw materials or on the labour employed by the firm, this has the effect of reducing costs and thereby resulting in an increase in the quantity supplied.

6. Number of sellers in the industry.
If the number of firms in the industry decreased e.g. due to rationalisation then the overall quantity supplied to the market would decrease.

7. Objectives of the firm.
If the objectives of the firm changed from that of profit maximisation to a deliberate reduction in output by firms in the industry then quantity supplied would fall.

7 + 6 + 6 + 6 = 25 marks graded.

Q2 Perfect Competition & Product Differentiation

(a) (i) A firm operating under conditions of perfect competition is a **'price taker'.**
Explain the concept of being a 'price taker'.

- This means that the individual firm must accept the price as it is set on the market.
- Each firm supplies such a tiny fraction of the market it cannot influence the market price.

6 marks graded.

(ii) Explain, with the aid of labelled diagram, the equilibrium position of a firm in **short run perfect competition.** (25 marks)

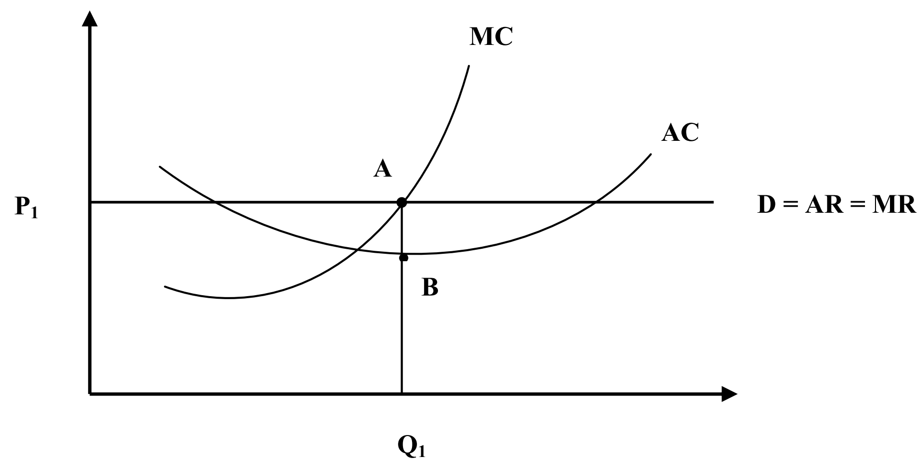
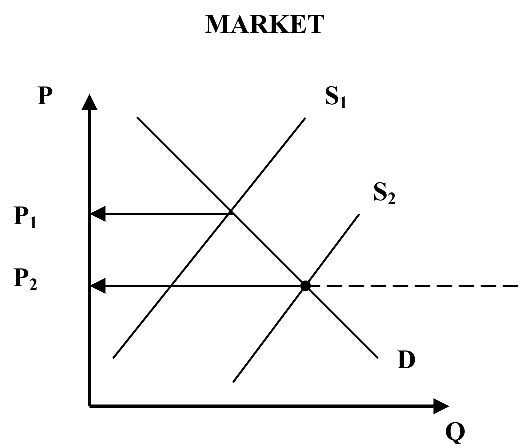
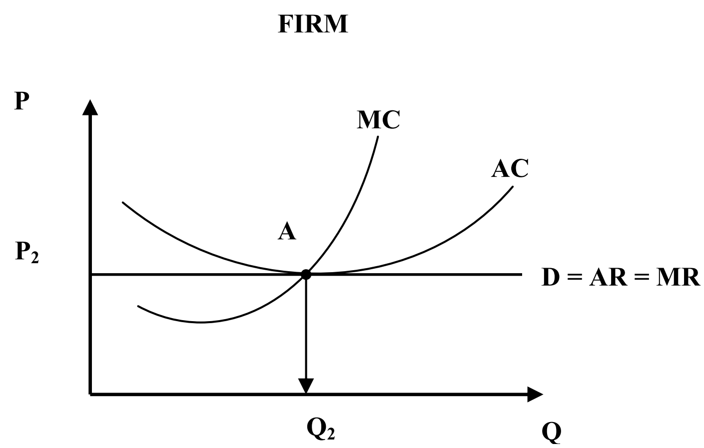


Diagram	*Explanation*
• MC curve	• At point A: MC = MR
• AC curve	• The firm produces Q1
• D = AR = MR	• Firm will sell this output at P1
• Point A	• Firm will earn SNP's because AR > AC.
• P1	
• Q1	
• Cost is at point B.	

19 marks graded.

(b) With the aid of a labelled diagram (s), explain the impact which the entry of new firms would have on the market **and** on the equilibrium position of this firm. (25 marks)





Market and Individual Firm.

Mkt. Diagram	Firm Diagram	Explanation Key Points
	• P axis	• Market supply curve shifts out to the right.
	• Q axis	• Market price falls / the firm's D/C falls
• D	• AC	• Firm will now produce a smaller quantity.
• S1	• MC	• Amount of SNP's earned will fall / be eliminated.
• S2	• D = AR = MR	
• P1	• P2	
• P2	• Q2	
	• Equilibrium point	

25 marks graded.

(c) (i) Many firms today engage in **product differentiation**. Explain this underlined term showing, with suitable examples, how it can be achieved.

(ii) Explain the effect of product differentiation on the AR and MR curves of a firm, which previously operated under conditions of perfect competition. (25 marks)

(i) 17 marks graded.

Product Differentiation

The goods which are produced are **close substitutes** / **similar goods** / **not identical goods**.

Product differentiation can be achieved by:

Explanation	**Example**
Branding Establishing different and distinctive brand names for the products	Nike, Addidas, Reebok
Competitive Advertising Creating differences in the products in the minds of consumers e.g. through packaging which clearly distinguishes one product from another	Daz v. Surf Kellogs Cornflakes
Product innovation Firms develop their product further (add value) so that it is better or more advanced than that of competitors.	Lyons pyramid tea bags; Avonmore – super milk. Fairy detergent – anti bacterial agents.

(ii) 8 marks graded.

Effect of product differentiation on the AR and MR curves of a firm

As a result of product differentiation:

- A firm's AR will be downward sloping from left to right.
  As products are close substitutes:
  If a firm lowers price it can expect to attract some but not all customers from other firms; if the firm increases prices it may expect to lose some but not all customers – so the firm will sell less at higher prices and more at lower prices. Consequently the demand curve (AR curve) facing the firm is downward sloping.
- If AR is falling then MR is also falling and lies below AR. To encourage more customers the firm must drop the price. The AR Curve is falling. The revenue from the increased sales will be reduced by the falling revenue on each unit previously sold at a higher price but now at a reduced price.

Q3 Factor Market: demand, supply & mobility

(a) The demand for labour as a factor or production is a **derived demand** and is affected by that factor's **Marginal Revenue Productivity** (MRP).

(i) Explain each of the underlined terms.

Derived demand	*Marginal Revenue Productivity*
Where labour is demanded for its contribution to the production process or from the demand for the goods it produces.	The extra revenue earned when an additional unit of factor of production is employed.

10 marks graded.

(ii) Outline **TWO** developments, other than a fall in MRP, which may result in a firm **reducing** its number of employees. (20 marks)

Demand for Pay increases.
If the workers are successful with such demands, costs of production will increase and profitability will fall. This may result in the firm having to make workers redundant.

Introduction of new technologies / mechanisation.
Increased mechanisation of the production process / introduction of cost saving technologies will reduce the demand for labour.

Fall in demand for the firm's output.
Any factors that causes a drop in the demand for the firm's output e.g. higher prices for the commodity, may lead to a reduction in demand for workers.

Government Policies.
If the government pursued policies which make it more expensive to employ workers then the employer may reduce the workforce e.g. raising the minimum wage rate.

Increased competition on the market.
If new firms enter the industry existing firms may suffer a reduction in demand, resulting in a loss of jobs in that particular firm e.g. opening of new supermarkets in many towns around the country.

Increases in the costs of production.
Any factor which causes a firm to become less competitive will result in a loss of sales, leading to job losses. e.g. currently oil/petrol costs are increasing which may result in job losses.

2 points at 5 marks each graded.

(b) (i) State/explain **THREE** factors which are currently affecting the **supply** of labour to the Irish economy.

1. **Wage levels within the economy / Backward bending supply of labour.**
   Higher wage levels in recent years act as an incentive for more people to supply their labour.
   For some workers as wage levels increase they may prefer increased leisure and reduce their supply.

2. **Size / Structure of population**.
   Ireland's population has increased with more citizens within the working-age bracket. S. of Labour increases.

3. **Participation Rate.**
   The number of people willing to work within the 16-65 age group has increased. More women working; people who once retired are willing to take up part-time employment.

4. **Rates of income tax within the economy**.
   In recent years these have fallen acting as an incentive for people to join the workforce.

5. **Labour mobility**.
   The workforce in Ireland has become more occupationally mobile: there are less barriers in place preventing the movement of workers. With EU enlargement, the free movement of labour is increasing.

6. **Government Policies**.
   The government has moved to ease restrictions on the entry of immigrants to Ireland; they are reducing the rate of PRSI on employers and are aiming to liberalise entry requirements into certain occupations e.g. pharmacies; hospital consultants; decreasing the average length of the working week i.e. nurses.

3 at 7 marks each graded.

(ii) The demand for labour has increased significantly in certain sectors of the Irish economy in recent years e.g. construction. Discuss **THREE** economic consequences of this situation. (30 marks)

1. Pressure on wage levels to rise.
Employers will be forced to increase wage levels in order to attract workers into those areas where shortages are occurring.

2. Deterioration / Loss of services.
Where workers are not available it will result in either a deterioration of services in those areas or a total loss of certain services.

3. Loss of investment.
Indigenous and foreign entrepreneurs may see such shortages of labour as a deterrent to investing and starting a business.

4. Inflationary pressures.
If wage levels increase such increases may be passed on to the final consumer in the form of higher prices.

5. Immigration
Shortages of labour in the Irish labour market are reported internationally. FAS has attempted to entice foreign workers to Ireland. The number of applications for refugees' status has also increased.

6. Difficulty in attracting / keeping workers in some sectors.
With current labour shortages and the attractiveness of higher pay in alternative employments certain sectors find it increasingly difficult to attract workers e.g. in the hotel, catering, tourism industries.
May require state intervention for the re-training of workers to fill sectors with vacancies.

7. Inability to maintain development of the state's infrastructure.
Because of the shortage of workers, developing the infrastructure at the pace necessary to sustain economic growth is not possible and this may affect future investment.

3 at 3 marks each graded.

(c) 'At a time of full (or near full) employment in the Irish economy, it is important that there should be the maximum **occupational mobility** and **geographical mobility** of labour'**.**

(i) Distinguish between the two underlined terms.
(ii) Outline THREE economic policies which could increase **either occupational** mobility of labour **or geographical** mobility of labour, in Ireland. *(25 marks)*

Geographical mobility of labour	**Occupational** mobility of labour
The ability/ease of a worker to move from one area to another	The ability/ease of a worker to move from one job to another
5 marks graded.	**5 marks graded.**
Economic policies:	
1. **Housing.** Increase the availability of affordable housing in those areas of shortages. 2. **Educational facilities.** Improve the availability of educational facilities to ease concerns of parents. 3. **Social infrastructure.** Improve the social infrastructure so as to make the areas more appealing for families e.g. shops, parks, leisure facilities. 4. **Supports by Government.** The government might provide adequate supports so as to entice people to move e.g. help with re-location costs etc. 5. **Information / Knowledge:** Provide up-to-date information on the possibilities of moving. Improve knowledge on the opportunities available for mobility.	1. **Education courses.** Provide courses for further education opportunities and at costs accessible to workers. 2. **Training / Re-training.** Provide opportunities for training / re-training at times / costs suitable for workers. 3. **Government Policies.** Change regulations on work permits; on access; FAS Training schemes; remove unnecessary language / cultural barriers. 4. **Trade Union Barriers**. Reduce barriers to entry into occupations e.g. NUJ, Equity; Irish Hospital Consultants.

3 policies at 5 marks each graded.

Q4 (b) Economic systems & Economists

(i) 'The Irish economy can be described as a **Mixed Economy'**.
Outline **FOUR** examples of economic activity in the Irish economy to support this view.

1. **Existence of Social Partnership**:
Allows for the involvement of the government and other social partners to set and achieve targets over a specified period of time.

2. **Existence of Semi-State bodies & private enterprise side by side:**
Producing goods and supplying services in areas like transport, energy and communications.

3. **Government Departments / various Regulators**:
Regulate economic activities through their actions e.g. the financial services regulator.

4. **Legislation**:
which controls the activities of all individuals / firms such as the various labour laws e.g. Minimum Wage Law / Planning Laws / Companies Acts etc.

5. **Use of taxation / government expenditure**:
the use of fiscal policy by the government affects economic activity and can alter market outcomes.

4 points at 4 marks each graded.

(ii) Do you consider that the Irish economy is moving towards more free enterprise or towards more central planning in recent years? Explain, your answer, using appropriate examples. (30 marks)

Moving towards more Free Enterprise

Activity	**Example**
Privatisation of state companies	Eircom, Aer Lingus, some Dublin Bus routes
Public Private Partnerships	Building of second level schools / hospitals
De-regulation of markets / Allowing competition into the industry	De-regulation of taxi industry; Allowing competitors into electricity generation; telecommunications networks i.e. O2, Meteor etc Allowing competitors to set up pharmacies;
Encouraging entrepreneurship	County Enterprise Boards; changing curricula in schools; lowering PRSI and CPT etc.

Moving towards more Central Planning

Activity	Example
Increasing Legislative framework	Introduction of minimum wage rate; Emergency legislation re: BUPA / QUINN health insurance;
Appointment of Regulators Establishing Tribunals of Enquiry	Regulator for Aviation / Financial services etc. Many tribunals of enquiry are currently examining the abuses of the free market system.
Fear of the 'Nanny State'	Individuals may feel that much of our daily lives are controlled / interfered with by the state e.g. smoking laws; planning laws etc.

2 points at 7 marks each graded.

(a) **Free Enterprise (Laissez Faire)** & **Command Economy (Central Planning)** are economic systems.
 (i) Explain each of the underlined terms.
 (ii) In relation to any **ONE** of the economic systems above, outline **TWO** possible economic advantages and **TWO** possible economic disadvantages. (25 marks)

<table>
<tr><th colspan="2">Free Enterprise (Laissez Faire)</th></tr>
<tr><td colspan="2">

Market mechanism: resources are allocated through the market / price mechanism.
Ownership of factors or production: nearly all factors of production are privately owned.
Limited government interference: government exists to supply public goods; provide a legal framework within which markets can work and prevent the creation of monopolies.
Decentralised decision making: the allocation of resources; the decisions on what to produce; how to produce and who gets the commodities: decided by individuals /entrepreneurs.
Motivated by Self-Interest: consumers, producers and property owners are motivated by this.

[Consumers aim to maximise their utility / Producers aim to maximise profit / Owners of factors aim to maximise their return]
</td></tr>
<tr><td colspan="2">6 marks graded.</td></tr>
<tr><th>Economic Advantages</th><th>Economic Disadvantages</th></tr>
<tr><td>
Choice:
Consumers with income have a wide choice of goods and services.

Efficiency:
Incentives exist for producers to be efficient. Those who are inefficient will be forced out by lower costs.

Innovation:
Producers who are innovative will be rewarded through increased sales on the market.

Economic Growth:
As all individuals are motivated by self-interest, each will strive towards their maximum efficiency and so aid economic growth.

Less Bureaucracy:
As decisions are made by individuals within the society, the costs of a large administration to administer matters is significantly reduced.
</td><td>
Distribution of income /wealth inequities:
Resources are allocated to those with spending power. Individuals who can’t supply a factor of production have no income.

Lack of essential public services:
If an activity does not make a profit then it may not be available e.g. education, health services - the government must provide these.

Vital services should not be in private hands:
It may be desirable to have certain services e.g. defence, judiciary, police under government control.

Growth of monopolies:
Some firms or groups of workers may try to gain control over individual markets.

Social costs of commodities ignored:
Producers and consumers may pollute the atmosphere and without government regulation no individual will pay the full price for a commodity.

Unemployment / Inflation:
If entrepreneurs choose the lowest cost of production or are pessimistic about profitability then workers may become unemployed. If shortages occur, inflation may result.
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<tr><td colspan="2">13 marks graded.</td></tr>
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Command Economy (Central Planning)	
• **Planning mechanism**: resources are allocated by the state through a planning mechanism. • **Ownership of factors or production**: all the factors of production owned by the state apart from labour – though the use of labour can be directed by the state. • **Motivated by common good:** consumers, workers and government are assumed to be selfless and, co-operating together to work for the common good. • **Maximum government interference**: government exists to regulate <u>all</u> economic activity. • **Centralised decision making**: the allocation of resources; the decisions on what to produce; how to produce and who gets the commodities are decided by the state.	
6 marks graded.	
Economic Advantages	**Economic Disadvantages**
Reduced inequalities in society / **More even distribution of wealth:** The government may place great emphasis on providing all citizens with a minimum standard of living e.g. subsidising essential food. **Provision of essential services**: The state may provide those services to citizens which it considers vital such as health care, education, public infrastructure. **Economies of scale**: The large scale of production may mean that the firm benefits from economies of scale. The government may be more efficient in the provision of those commodities which require a large capital investment e.g. energy generation ; roads etc. **Full employment** Historically centrally planned economies were able to achieve full employment while those economies consider free enterprise suffered from unemployment.	**Shortages in goods and services**: Because the state may limit prices there may be excess demand and so shortages develop and the available goods may be allocated by a queuing system. **Restricted choice / freedom for individuals**: Workers may be allocated particular jobs or in particular areas and maybe restricted in their ability to change jobs by state requirements. Consumers will have little say in what is produced and what is available may be quite restricted. **Inefficiency:** Because there is little incentive for enterprise and innovation, individuals and firms are not encouraged to take risks, work harder or innovate. **Low economic growth:**: As all individuals are not motivated by self-interest this may result in reduced economic activity resulting in poor economic growth rates. **Bureaucracy / Corruption / High Taxes:** With so many decisions to be made it may mean that the system becomes over bureaucratic further reducing incentives to work / or be innovative. Taxes may have to rise to fund the administration involved. Corruption may develop within society.
13 marks graded.	

(c) In the case of any **TWO** of the following economists, outline **TWO** contributions which each one has made to the development of economic ideas: Adam Smith, Alfred Marshall, Keynes, Milton Friedman (20 marks)

Adam Smith

(a) **The pursuit of self interest –**
This best benefited the individual and hence best benefited society.

(b) **Division of Labour –**
Increased productivity and a country's wealth. His example - the manufacture of pins illustrated the benefits of the division of labour.

(c) **Labour Theory of Value –**
The value of an item was equal to the amount of labour that went into producing the product.

(d) **State protection of property rights –**
Encourages the accumulation of personal wealth.

(e) **'Invisible hand of competition' –**
Allows a self regulating market to operate thus ensuring economic progress is achieved.

(f) **Perfect Competition -**
Free entry into markets; profits sufficient to reward entrepreneurs; inefficiency penalised and price would be based on the cost of production. Monopolies would not persist.

(g) **Laissez-faire –**
no justification for government intervention in the economy except for defence/justice.

(h) **Canons of Taxation –**
To fund the state's defence/justice systems taxation was necessary and he devised the four principles of a fair tax system: equity, economy, certainty and convenience.

(i) **Paradox of Value –**
He distinguished between 'value in use' and 'value in exchange'. Some items had a vast utility (air, water) but are not exchanged, while others (diamonds) possessed little utility but could command a great value in exchange.

(j) **Free Trade –**
He advocated international free trade unhindered by the imposition of tariffs so that markets could operate effectively and allow the gains from trade to be spread between nations.

Alfred Marshall

(a) Theory of Value
The value of a commodity was determined in the short-run by its utility and demand and in the long-run was determined by its cost of production.

(b) Distribution of income / wealth:
The return to each of the factors of production was determined by their marginal productivity.

(c) Competition regulated economic activity:
Government intervention and inter-business co-operation could regulate economic activity and enhance economic freedom.

(d) Growth of monopolies could be prevented by:
Regulation by government; consumer information; increased number of small investors/more accountability.

(e) Quasi rent:
The economic rent earned by factors of production in the short run when demand exceeded supply.

(f) Developed concepts of price-elasticity of demand / consumer surplus / how markets adjusted to changes in D & S over time: quantifying buyers' sensitivity to price; the surplus value or utility a consumer enjoys; Market period, short period and long period.

John Maynard Keynes

(a) **National Income at less than full employment**:
Keynes observed that national income could reach equilibrium without reaching full employment and hence he suggested government intervention to help create jobs when required.

(b) **Output is demand determined**.
The size of national income depends on expenditure i.e. C = I + G + X − M

(c) **Favoured government intervention in the economy**.
The job of the government is to manage the economy.
The government can use fiscal policy to create full employment.

(d) **Investment decisions by entrepreneurs**.
He stated that investment by entrepreneurs depended more on businessmen's expectations than on the rate of interest.

(e) **Investment could be less than savings**.
This could result in a leakage in spending which decreases national income and employment.

(f) **New Economic Concepts – The Multiplier**
He developed new tools to explain his theories including the multiplier: Any initial increase in spending will cause a greater much greater increase in GNP due to the fact that one person's expenditure is another person's income. He developed concepts such as: - MPC, MPM, etc.

(g) **Liquidity Preference Theory**:
People may prefer to hold their wealth in money form for three reasons:
transactionary; precautionary and speculative reasons.

(h) **Managed system of exchange rates**:
He favoured a system of foreign exchange rates which could be 'managed' by the state rather than the gold standard.

Milton Friedman

(a) Monetary policy:
Should be the main instrument used by the government to manage the economy.

(b) Control of money supply:
Monetarists suggest strict control of the money supply so as to control inflation.

(c) Reduce inflation:
This increases competitiveness which may lead to increased exports and job creation in the log run..

(d) Laissez faire principles:
He favoured a return to laissez faire principles - with minimum state intervention; de-regulation of markets; privatisation of state bodies.

(e) Supply side policies:
He favoured any policies which improved market efficiency / boosted supply: de-regulation of markets; reducing the ability of trade unions to interfere with the labour market.

2 economists at 10 marks each graded.

Q5 Budgets: Terms; effects on budget; lowering income tax levels

(a) Explain the following economic terms, using appropriate examples in each case: (25 marks)

Economic Terms	Examples
Government Current Budget: 5 marks • Outlines the government's expected / planned revenues and expenditures • for the forthcoming year / day to day purposes or • Current expenditure is spent on items used up during the year / day to day items. • Current revenue is money collected in taxes (direct / indirect; and other income during the year.	**2 marks** Teachers Salaries; Social Welfare Payments. VAT; Income Tax revenues; Stamp Duties.
Government Capital Budget: 4 marks • Outlines the governments planned expenditure on items not used up during the year but which / increase the productive capacity of the country. • The money to pay for capital expenditure is usually through borrowing by the government.	**2 marks** Building roads Building hospitals Sale of semi state company
Revenue Buoyancy 4 marks • The actual taxation revenue collected during the year is greater than that which had been planned for.	**2 marks** Levels of income tax / stamp duties collected in the past year greater than had been planned.
Regressive Taxation 4 marks • One that takes proportionately less in tax as a person's income increases.	**2 marks** VAT / Excise duties.

(b) State and explain how a **government budget** could be affected by each of the following developments:
- (i) a rise in Interest rates in the economy;
- (ii) a fall in the rate of stamp duty on property purchased;
- (iii) the introduction of subsidised child care for all families within the state. (30 marks)

Factor	Effect on Government Current Revenue or Government Current Expenditure	Explanation
Interest rates rise	Government Current Expenditure increases	Increased expenditure by government to meet interest repayments on National Debt.
	Government Current Revenue decreases	With higher interest rates people may borrow less, resulting in reduced consumer spending and falling tax revenues.
	Government Current Revenue decreases or Government Current Expenditure Increases	Investment may decline resulting in job losses, lower direct tax revenue collected and increased social welfare expenditure.
Rate of Stamp duty on property purchased falls	Government Current Revenue increases	May result in increased property sales, increasing the amount of revenue generated. However the final effect depends on the price elasticity of demand for houses.
Subsidised child care for all families introduced	Government Current Expenditure increases	Increased expenditure by the state on maintaining crèches; paying salaries etc.
	Government Current Revenue increases	Might encourage more people to return to work thereby increasing the tax revenue collected.

3 at 10 marks each graded.

(c) You are appointed Economic Advisor to the Minister for Finance. Outline the economic arguments you would identify for the Minister in favour of lowering Irish income taxation rates. (20 marks)

Maintain standards of living during rising inflation.
With rising inflation at the moment, standards of living are falling.
To alleviate this hardship it may be appropriate to reduce income tax rates – leading to greater disposable incomes.

Increase participation in the workforce / Incentivise the workforce.
By allowing workers to take home more of their income it may act as a further incentive for more people to join the labour market or encourage existing workers to increase their level of work.

Encourage continuation of Social Partnership.
It would show trade unions that the government is committed to the continuation of social partnership and encourage the partners to enter new negotiations.

Maintain / Improve competitiveness.
If workers have higher disposable income they may moderate their demands for wage increases, reducing the costs for employers and thus maintain / improve the competitiveness of Irish industry.

Enable Ireland attract foreign industry / encourage investment.
By lowering income tax rates Ireland may continue to be attractive to mobile foreign investment.

Stimulate economic activity.
With lower tax rates, disposable income rises and so should spending – possibly increasing the indirect tax revenues collected. This will increase demand and may lead to higher employment and continued economic growth.
[The adverse effects of this is that it could result in inflation and greater imports].

Discourages the black economy.
The reduction in income tax rates may encourage workers to avoid tax avoidance and tax evasion measures and so legitimise their activities.

4 points at 5 marks each graded.

Q6 National Income & Economic Growth / Development

(a) Components of National Income are: Consumption; Investment; Government Expenditure; Exports, Imports.

(i) Show the equation which links all these components with the level of National Income in the economy.

$$\mathbf{Y = C + I + G + X - M} \qquad \textbf{5 marks}$$

(ii) Explain what determines/influences the size of **each** of these components of National Income. (25 marks)

Consumption: 2 at 3 marks each graded.

- **Levels of incomes (irrespective of source):** as income rises, the level of spending tends to rise.
- **MPC**: the higher the MPC, the higher will be the level of spending.
- **Availability of credit**: as credit becomes more easily available the level of spending will rise.
- **Rate of interest**:
  Currently interest rates are increasing and with borrowing falling, spending will fall.
- **Rates of (income) taxation**: if these increase, disposable income falls and spending will fall.

Investment: 2 at 2 marks each graded.

- **Rate of Interest / MEC:**
  as interest rates rise, borrowing becomes more expensive and investment tends to fall.
- **Expectations of business people**:
  are they optimistic about the future? Does government policy favour risk taking; are the levels of taxation conducive to risk-taking etc.

Government Expenditure: 1 at 2 marks graded.

- Primarily depends on the **political decisions of the government** and the type of fiscal policy being pursued by the state.

Exports: 2 at 2 marks each graded.

- **Income levels in our export markets**: if high then the demand for Irish exports may increase.
- **Competitiveness of Irish exports**: levels of domestic inflation v. international rates.
  If our goods are competitive on export markets then demand may increase.
- **Value of the euro** in relation to other currencies e.g. the US dollar / Pound Sterling.

Imports: 2 at 2 marks each graded.

- **Levels of incomes (irrespective of source):**
  as income rises, the level of spending on imports tends to rise.
- **MPM**: the higher the MPM the higher will be the demand for imports.
- **Value of the euro** in relation to other currencies e.g. the US dollar / Pound Sterling.

(b) The table shows the level of National Income, Consumption, Investment; Exports, and Imports at the end of Year 1 & Year 2.

Year	National Income	Consumption	Investment	Exports	Imports
1	€10,000	€8,600	€1,000	€1,200	€800
2	€11,200	€9,500	€1,300		€1,100

Calculate the following, showing all your workings:

(i) The level of Exports in Year 2;
(ii) The Marginal Propensity to Import;
(iii) The Marginal Propensity to Save;
(iv) The size of the multiplier. Explain the economic meaning of this multiplier figure. (25 marks)

(i) Level of Exports in Period 2 – **5 marks**

$$Y = C + I + X - M$$
$$\text{€}11{,}200 = \text{€}9{,}500 + \text{€}1{,}300 + X - \text{€}1{,}100 = \boxed{\text{€}1{,}500}$$

(ii) MPM – **5 marks**

$$\boxed{\frac{\text{€}300}{\text{€}1{,}200} = 0.25}$$

(iii) MPS – **5 marks**

€300 = €1,200 0.25	**MPS= 1 – MPC 1 – 0.75 0.25**

(iv) The Multiplier – **5 marks**

Method 1

Injections = €600. The increase in national income = €1,200. So the injections have doubled national income. The multiplier is $\boxed{2}$

Method 2

$$MPC = \frac{\text{€}900}{\text{€}1{,}200} = 0.75 \qquad \text{Multiplier} = \frac{1}{1 - (75\% - 25\%)} = \boxed{2}$$

Method 3

$$\frac{1}{MPS + MPM} \qquad \frac{1}{0.25 + 0.25} \qquad \boxed{2}$$

The economic meaning of **this figure**:

This figure [2] means that for any given injection into the economy, national income will increase by twice the original injection.

5 marks.

(c) Less developed countries (LDCs) are primarily concerned with achieving **economic development** while developed countries are concerned with **economic growth**.

(i) Distinguish between the two underlined terms.

Economic Development	Economic Growth
An increase in the level of income / standard of living / output / GNP per person in a country, accompanied by a change in the structure of society.	An increase in GNP per head, without any changes in the structure of society.

13 marks graded.

(ii) Outline **THREE** characteristics which indicate that a country is a LDC.

High rate of population growth.
Rates are very high resulting in economic problems which the government finds hard to resolve.

Famine.
Too frequently famine occurs in LDCs resulting in disease; deaths at early age; high medical costs.

Foreign Debts.
These are very high. Their repayment uses up government revenue and their repayments can cripple the economy.

Uneven distribution of wealth.
In some LDCs, a minority may control a large part of the country's wealth resulting in widespread poverty.

Over-dependence on one crop.
Some LDCs are over-dependent on one crop. The country may be subject to crop failure and/or a wide variation in export prices .

High percentage of the population engaged in extractive/primary industries.
This results in not enough workers in secondary & tertiary sectors, resulting in low standards of living.

Poor Terms of Trade.
LDCs may suffer from low export prices and high import prices and hence the gains from trade are reduced.

Poor living conditions / Inadequate infrastructure.
A large percentage of the population live in shanty towns with no water and poor sanitation.

Lack of capital.
LDCs may lack the capital which is essential for economic development & employment generation.

Low per capita income for the majority of the population.
This results in a poor standard of living and a consequent low demand for goods and services.

Poor levels of education/literacy.
This will act as an impediment to economic development, resulting in high unemployment.

Political corruption.
Some LDCs spend a lot on bureaucratic administration / military spending which can result in civil unrest.

Exploitation by multinationals of LDCs / Economic Dualism.
This may take the form of low wage rates; lack of care for the environment; control over key exports etc.

3 points at 4 marks each graded.

Q7 Balance of Payments; Effects of rising euro; effects of enlargement of EU for Ireland

(a) The Balance of Payments is made up of the **Current Account** and the **Capital Account**.
Explain each of the underlined terms.
Include details of the main components of each account in your explanations. (30 marks)

Balance of Payments

Current Account	**Capital Account**.
20 marks graded.	**10 marks graded.**
This shows the receipts and payments for visible and invisible trade over a period of time. or This shows the difference between total exports and total imports	This shows a country's receipts and payments for capital items over a period of time. or This is a record of a country's inflow and outflow of capital / items of a non-recurring nature
Details of the main components	Details of the main components
1. Visible Trade / Balance of Trade: • Visible exports less Visible imports • Trade in goods 2. Invisible Trade: • Invisible exports less Invisible imports • Trade in services	1) Investments by foreign companies/individuals in Ireland. 2) Investments by Irish companies / individuals abroad. 3) Borrowings / grants from foreign sources. 4) Grants / loans to foreign recipients.
	or **Capital account** • Amounts receivable under the EU Regional Development Fund & Cohesion Fund. • Migrants transfers (net worth of immigrants / emigrants) • Acquisitions and disposals of non-produced, non-financial assets (patents, copyrights) **Financial account** • Transactions in foreign financial assets and foreign liabilities. • Direct investment i.e. net investment by foreign companies in Ireland. • Portfolio investment: acquisition & disposal of equity and debt. • Other investment: loans, currency & deposits, financial derivatives & other accounts receivable and payable. • Reserve assets: qualifying assets under the control of the Central Bank of Ireland

(b) Suppose the euro (€) increases in value relative to the American dollar ($) and sterling (£). Outline the likely effects this increase would have on any **THREE** components of the Balance of Payments, which you listed in answering (a) above. [At least one component should be from the Capital Account].

(25 marks)

Effects of increase in value of euro (€) relative to the American dollar ($) and sterling (£)

Current Account	Capital Account.
Export prices increase (visible / invisible). Demand for Irish exports may fall. Less foreign revenue earned from exports to US / UK.	**Real value of money invested abroad is greater:** May result in greater capital outflows.
Import prices decrease (visible / invisible). Demand for imports from US & UK may rise. More euros paid out for imports from US / UK.	**Real value of money from abroad invested in Ireland is reduced**: May result in reduced capital inflows.
	Irish borrowing abroad is more attractive. May result in increased foreign borrowing.
	Foreign investment in Ireland is less attractive. May result in reduced foreign investment in Ireland.

Must have a minimum of ONE effect on the Capital account.

25 marks graded.

(c) The enlargement of the European Union (EU) continues with the addition of Bulgaria and Romania in January 2007. There are now 27 member states.
Discuss **FOUR** economic consequences for the Irish economy, of the EU enlargement process. (20 marks)

Positive consequences	Negative consequences
1. Larger market Resulting in increased sales opportunities for Irish firms. Irish consumers now have the opportunity to avail of a larger variety of goods/services.	**1. Lower costs of production** Firms in the new member states have lower costs of production making it difficult for Irish firms to compete with.
2. Profitable Investment opportunities Irish firms may see that their profits could increase if they made investments in the new member countries.	**2. Increased competition** Due to the higher cost base facing Irish firms, Irish consumers may travel to avail of cheaper services resulting in reduced demand for Irish firms e.g dental / health services.
3.Source of Labour / New Skills Irish firms may be able to meet their labour shortages by employing citizens from these countries / new skills may also be available.	**3. Decline in funds for investment in Ireland** Irish citizens may invest in the new member states resulting in less funds being available for investment at home.
4.Wage demands moderate If labour from these countries becomes available to Irish firms this may ease the pressure on labour shortages and to a possible moderation in wage demands within Ireland.	**4. Agriculture** As more of EU funds will be needed in new states to develop their agriculture this may result in less funds being available for Irish Agriculture.
5. Educational opportunities With new members, Irish third level students now have the opportunity to pursue part of their studies in these countries – strengthening their opportunities for learning.	**5. Irish firms become more peripheral** Ireland as one of the few EU member states not connected by land, the transport costs involved in trade act as a further deterrent to trade.
6. Expansion of Trade Enlargement means greater peace within the EU. This reduces uncertainty which may encourage greater trade, resulting in economic growth and a growth in international trade.	**6. EU structural funds** The new members will require a greater proportion of these funds to develop their economies thereby reducing the funds available for existing members, including Ireland or as the EU requires greater finance it may be necessary for Ireland to become a net contributor to the EU
	7. Pressure on state's infrastructure Given that the new members have higher unemployment rates than Ireland we can expect an increase in immigration. This may put increased pressure on the state's infrastructure i.e. the health and education sectors.

4 points at 5 marks each graded.

Q8 Irish Economy; Economic Aims; Falling National Debt to GDP ratio.

(a) Outline, using appropriate figures, how the Irish economy performed in the past twelve months in **each** of the following areas: employment; interest rates; price inflation; government taxation. (20 marks)

Employment

- 76,800 new jobs were created in the 12 months to the end of February.
- The number of people at work rose by 3.8 pc to 2.07 million at the end of February.
- With a slow down in the rate of economic growth job losses have and are being announced.
- 159,800 persons were recorded on the live register in May 2007.
- Represents approx. 4.5% of the labour force.
- The Central Bank predicts an average unemployment rate of 4.5% in 2007.

Interest Rates

- Interest rates continue to rise.
- The ECB has increased the base interest rate six times in the past 12 months – the most recent increase being in June 2007.
- The current base rate is 4.0% with further increase expected in the Autumn.
- With the increase in interest rates the cost of repaying mortgages has increased and the market for property adversely affected.

Price Inflation

- Inflation continues to rise in Ireland.
- Inflation in Ireland is above (twice) the euro average of approx. 2.2 per cent.
- Inflation has risen partly due to the increase in the value of the Euro; increase in interest rates and the increase in international oil prices.
- 5% in May 2007 – a fall of 0.1% from the previous month.

Government Taxation
Income tax

- In the 2007 Budget the government reduced the higher rate of income tax from 42% to 41%.
- The tax bands were also widened.
- The standard rate of tax was left unchanged.
- Those on the minimum wage rate were removed from the tax net.

Indirect taxes

- There was no change in VAT rates.
- Excise duty on cigarettes was increased by 50c per packet of 20 – an increase of 7.6%.

Property Taxes

- Mortgage interest relief for 1st time house buyers was doubled.
- Some political parties plan to change the stamp duty arrangements for 1st time home buyers.
- Revenue from taxation continued to increase but at a slower rate – with a decline in the rate of increase in revenue collected from stamp duty and other property taxes.

4 at 5 marks each graded.

(b) (i) State and explain **FOUR** economic aims of the Irish government.

1. Achieve Full Employment.
Ensure that we maintain our competitiveness and so maintain jobs in Ireland.

2. Control price inflation.
The government must try to reduce the pressure on rising prices within the economy.
While oil prices are outside its control it can try to limit wage increase and through the introduction of competition encourage price competitiveness in services.

3. Achieve moderate economic growth.
While a slowdown is expected the government must try to manage economic activity and ensure that growth takes place. It aims to do this through its taxation policies.

4. Encourage exports.
The only measure available is to try to improve competitiveness for Irish exporting industries.

5. Control government finances / reduce borrowing / manage the national debt.
While we have become accustomed to increasing tax revenues, this is expected to fall. So pressure exists on the government to control expenditure, in particular the cost of providing public services

6. Reduce taxation levels / achieve taxation equity.
Current policy is to continue to reduce income tax but this may result in 'stealth taxes' and/or the deterioration in public services.

7. Promote balanced regional development.
This is being pursued by the National Development Plan and focusing on the creation of regional gateways.

8. Improve infrastructure.
The further development of the road infrastructure, provision of public transport, development of the airports and seaports etc.

9. Improve state services: health/education services / achieve a just social policy.
Increasing emphasis is being placed on the improvement in health services, the provision of further places in primary schools, improvement in school buildings and the development of third level education.

10. Achieve a more equitable distribution of income.
Increasing the levels of pensions and improving social welfare payments are attempts by the government to help re-distribute wealth.

4 points at 3 marks each graded.

(ii) Discuss **TWO** examples where economic policies introduced to achieve one economic aim, make it more difficult to achieve one of the other aims.

1. Control of national finances v. full employment / economic growth.
2. Full employment v. balance of payments equilibrium.
3. Full employment v. price stability.
4. Economic growth v. balanced regional development / price stability.
5. Economic growth v. balance of payments equilibrium.

2 sets of conflicting policies: 13 marks graded.

(c) 'The **National Debt** / **GDP** ratio has fallen from over 90% during the first half of the 1990's to an estimated 25.1% at the end of 2006'. (National Treasury Management Agency)

(i) Briefly explain each of the underlined terms.

National Debt	GDP
This is the total amount / cumulative of government borrowing which is outstanding	The output produced by the factors of production in the domestic economy irrespective of whether the factors are owned by Irish nationals or foreigners. Measures the total income arising from productive activity within the state.

2 explanations at 7 marks each graded.

(ii) Outline the economic benefits of this changed situation for the Irish economy. (16 marks)

1. Reduced annual interest repayments.
A declining national debt to GDP means that the annual cost of repaying our national debt is declining.

2. More funds available to the government for current use.
With less funds being used to meet our annual interest repayments the government has more funds available for use for other purposes.

3. Reduced burden on future taxpayers.
The decline will mean that the government will not have to contemplate increasing future taxes on future taxpayers.

4. Improved international credit-rating.
Unlike other countries the fact that Ireland is seen to have a declining national debt as a percentage of GDP will mean that our credit-rating improves.

5. Adhering to requirements of the Euro stability pact.
Unlike other members of the Euro Ireland does not have a difficulty in meeting the conditions of the stability pact and hence no corrective action need to be taken in economic policy matters.

6. Prudent management of economy by government.
Citizens may be made aware that the government's management of the economy is prudent and this may boost morale.

7. Possible deterioration in public services.
If the reduced debt to GDP ratio is caused by a reduction in current borrowing the government may spend less on public services resulting in a deterioration of these services i.e. the health service.

8. Reduced spending on infrastructure.
If the reduced debt to GDP ratio is caused by a reduction in capital borrowing then there may be less spending on the state's infrastructure which may inhibit the future growth of the country.

4 points at 4 marks each graded.