



Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE 2008

MARKING SCHEME

ECONOMICS

HIGHER LEVEL

Higher Level Economics

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

- There is no suggestion that the enclosed support notes are exhaustive or 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.

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Section A - 100 Marks

1. State **three** factors that determine the efficiency of labour:
 1. **Education:** the level / quality of education attained by the worker.
 2. **Training:** the quality / extent of training available to the worker which may improve the worker's skill.
 3. **Innate talent of the worker:** some workers may possess innate talents making them highly efficient.
 4. **Quality of the other factors:** if these are exceptional in quality then the worker's efficiency will be enhanced.
 5. **Quantity of other factors available:** efficiency will be improved if the worker has sufficient quantity of other FOPs available for use.
 6. **Living conditions of the workforce:** if workers are healthy, well nourished and have decent accommodation then they will work in a more efficient manner.
 7. **Degree of specialisation:** by concentrating on performing a single task workers become faster and more skilful and therefore are more efficient.
 8. **Climatic conditions:** if a place of work is too hot or too cold then this may affect the workers effort.
 9. **Management expertise:** good managers can get the best out of their workforce, leading to efficiencies, improved staff morale/staff motivation.
 10. **Commitment of the worker :** if workers are highly motivated and committed to work then they will operate more efficiently

16 marks graded.

2. Explain the term the **Black economy** and state one method by which the government could discourage it.

Explanation: All economic activity that goes unrecorded in National Income Accounts.

Methods of discouragement:

1. Reduce direct taxation/indirect taxation, alterations to tax system.
2. Better enforcement by revenue commissioners / simplification of the tax system.
3. Make good use of tax revenue, and educate public about same

16 marks graded.

3. A firm manufacturing 100 school desks weekly has the following total costs of production: Labour €2,000 (hired weekly); Raw Materials: €3,500; Normal Profit €1,500; Rent €3,000. What is the minimum price per school desk this firm could charge in the **short run**?

Workings / Explanation	€
Labour	2,000
+ Raw Materials	3,500
Total Cost	5,500
Cost per unit	<u>5,500</u>
	100
Cost per unit	55
A firm must cover its variable costs in the short run.	

16 marks graded.

4. Define **economic development**.

Definition:

An increase in the GNP per person accompanied by a change in the structure of society.

State TWO policies by which governments in LDCs might promote economic development:

1. Promote population control

Governments could encourage a reduction in population by various measures including: educating the population in family planning methods; improving the welfare of its citizens; providing better social services for its citizens.

2. Improve infrastructure

Provision of clean water & proper sanitation. Development of public housing, roads, power supplies etc.

3. Promote land/ agricultural reform

Decrease emphases on one crop/diversify production. Try to spread ownership of land.

Improve production methods/modernise the agricultural industry.

4. Improve education/literacy skills

Start with a basic literacy programme to improve literacy skills. Provide technical skills to the population. Provide primary education. Develop the secondary sector and initiate further education programmes.

5. Incentives for development of enterprise

Try to foster a movement away from a dependency culture and encourage enterprise. Use borrowings to encourage enterprise so as to create sustainable employment.

6. State bureaucracy / corruption/ spending on arms.

Try to reduce bureaucracy within state institutions. Eliminate corruption so that aid flows to those who it was intended for. Divert funds from arms spending to more urgent current requirements.

16 marks graded.

5. Free Enterprise is defined as an economic system in which:

The market mechanism operates; the factors of production are privately owned; there is limited government interference; resources are allocated by a decentralised decision making process and citizens are motivated by self-interest.

One economic advantage of this system:

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.

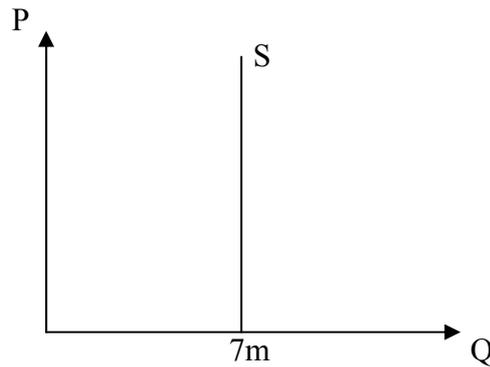
Innovation: Producers who are innovative will be rewarded through increased sales in the market.

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.

16 marks graded.

6. China will host the Beijing Olympic Games in August 2008 and 7 million tickets are available for the event. On the diagram below draw the supply curve for tickets and explain the reason for its shape.



Complete correct diagram: 5 marks graded.

Explanation:

The supply of tickets available for the Olympics is fixed at 7 million. Regardless of price this seating capacity will remain unchanged.

12 marks graded.

7. 'Ireland's current account in the **Balance of Payments** is in deficit'. Explain the meaning of this statement and state **two** reasons why this situation exists

Explanation: Total imports exceed total exports

11 marks graded.

Reasons:

1. Invisible imports exceed invisible exports.
2. Increase in the value of the euro has resulted in a decline in exports from Ireland /increase in imports from US/UK.
3. Repatriation of profits by multinationals operating in Ireland
4. Repayments on external portion of national debt
5. Greater disposable incomes in Ireland which results in an increase in the level of imports.

2 reasons at 3 marks each graded.

8. The diagram below represents the long run equilibrium of a firm in imperfect competition, which seeks to maximise profits. Label the diagram and use it to describe the long run equilibrium position for a firm in imperfect competition

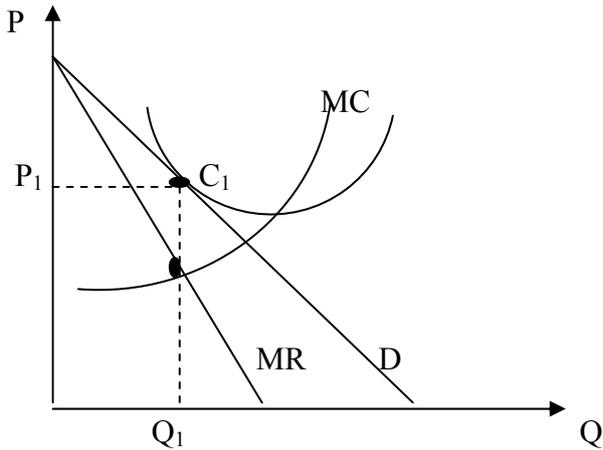


Diagram 5 marks graded.

Conditions:

1. $MR = MC$, profit maximisation, equilibrium
2. Equilibrium price = P_1
3. Equilibrium quantity = Q_1
4. Normal profit $AR = AC$ /Cost of production C_1
5. Not producing at lowest point of AC curve (inefficient).

4 conditions: 12 marks graded.

9. State **two** economic reasons for increased oil prices

1. **Greater demand for oil:** Newly industrialised countries such as China, India (BRIC).
2. **Affluence/Economic Growth:** with higher disposable incomes/greater purchasing power, as a result of economic growth there is a greater demand for bigger vehicles, more airline travel driving up oil prices.
3. **Reserves of oil declining/ high cost of extraction:** Oil is a non-renewable resource.
4. **Green taxes/excise duties:** In many countries a percentage of the price is a form of taxation.
5. **Lack of production in Middle East;** e.g. Iraq conflict, political uncertainty.
6. **Speculation:** investors are speculating on future prices of oil in world markets.

One Social Cost:

1. **Environmental damage:** Oil exploration increases as reserves run low (Irish coastline)/destroying rain forests in order to grow crops for bio fuels.
2. **Loss of excise duty:** If people cut back on use of oil, government loses tax revenue
3. **Increasing inflation;** The rising price of oil has added to inflationary pressures in some economies and a consequent fall in economic growth.
4. **Rising world food prices:** As countries switch production to crops for bio fuels, food prices rise.
5. **Shortage of food** particularly in developing nations.

One Social Benefit:

1. **Environment:** there may be a reduction in pollution as people cut back on use thus helping environment/greater economy in the use of oil.
2. **Public transport:** If oil costs rise consumers may be more willing to use public transport.
3. **Less traffic congestion:** Consumers cut back on use of cars
4. **Incentive to source alternative sources of energy:** As oil becomes expensive other sources of energy may become a more viable solution.

17 marks graded.

Q1 Demand, Elasticity

- (a) (i) Explain with the aid of an example, the '**Law of Demand**'.
(ii) State and explain **three** exceptions to the 'Law of Demand' (20 marks)
- (i) The Law of Demand states that an increase in price leads to a decrease in quantity demanded, or a decrease in price leads to an increase in quantity demanded.

Example

If price of a bar chocolate increased by 5c per bar then quantity demanded or purchased would fall.

Explanation and example: 5 marks graded.

- (ii) State and explain **three** exceptions to the 'Law of Demand'

1. Giffen Goods

For certain necessities a rise in price causes an increase in demand while a fall in price causes a fall in demand. Goods of lower quality make up a large part of the spending of low income families. As the price falls, real incomes increase and families buy less of these goods and purchase more better quality goods. As the price rises they have less income to spend on other types of goods so they tend to increase their demand for these goods.

2. Status Symbols / Snob items / Ostentatious Goods / Goods of Conspicuous Consumption

Some commodities by their exclusiveness or expensiveness are attractive to some buyers. A rise in price makes them more exclusive, and therefore, more attractive to those with the incomes to purchase them. A fall in price may lead to a fall in quantity demanded as they may no longer appear as exclusive to the rich and are still outside the price range of the poor.

3. Goods the purchase of which is influenced by expectations as to future prices / Speculative goods

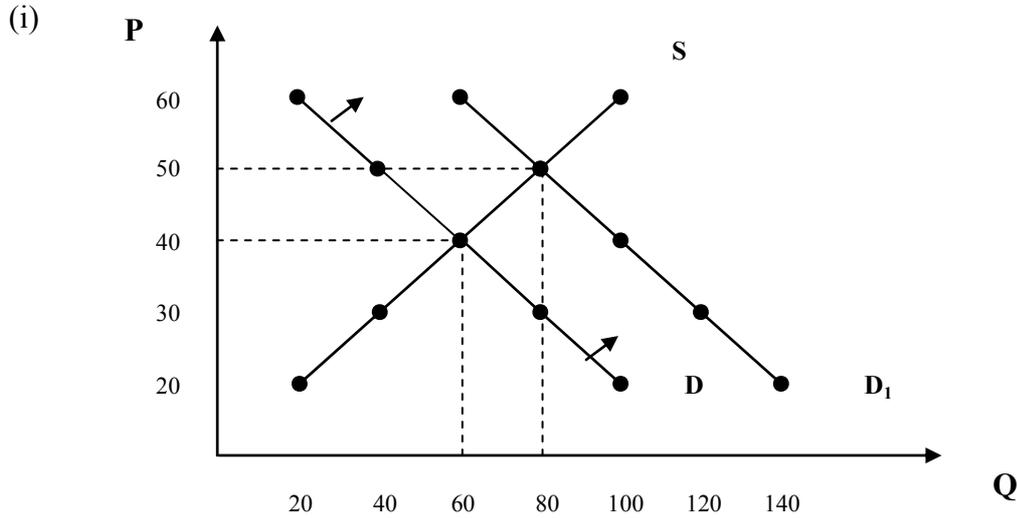
If prospective buyers think that prices are likely to be even higher in the future, the current level of demand may not fall even if prices increase e.g. if a person is considering buying a house the possibility that prices are likely to be even higher in the future will probably stimulate demand at current prices.

4. Goods of Addiction

In the case of those goods to which a person becomes addicted e.g. drugs, they no longer act rationally. They become so addicted to the drug that in order to get the same 'buzz' from consumption of the drug, demand for the commodity may increase, even when the price of the commodity increases.

3 exceptions at 5 marks each graded.

- (b) (i) Using the data, draw the diagram showing the market demand and supply curves for MP3 Players.
(ii) Show on your diagram the price and quantity of MP3 Players at which this market is in equilibrium.
(iii) Using this data, calculate the price elasticity of demand when price changes from €40 to €50. (Show all your workings).
For this price change is demand for MP3 players elastic or inelastic? Explain your answer. (30 marks)



(i) Diagram

- Correctly labelled demand curve
- Correctly labelled supply curve
- Correctly labelling Price and Quantity axes
- Correctly labelling demand and supply curves

14 marks graded.

(ii) Correctly identifying equilibrium on diagram:

Equilibrium price €40
Equilibrium quantity 60 units

2 marks.

(iii) Elasticity

$\frac{\Delta Q}{\Delta P} \times \frac{P_1 + P_2}{Q_1 + Q_2}$
$\frac{-20}{10} \times \frac{€40 + €50}{60 + 40} = \frac{-20}{10} \times \frac{90}{100}$
-1.8
Price Elastic
Because the PED is greater than 1

14 marks graded.

- (c) (i) Demand increases by 40 units at each price, so the new demand is as follows:
(ii) Explain **two** possible reasons for the shift in the demand curve. (25 marks)

Price - €	New Quantity Demanded
20	140
30	120
40	100
50	80
60	60

Diagram

- Correctly labelled **new** demand curve
- Correctly showing new equilibrium price and equilibrium quantity
 - Equilibrium price €50
 - Equilibrium quantity 80 units

11 marks graded.

- (c) (ii) Explain **two** possible reasons for the shift in the demand curve.

1. Increase in consumers' incomes

With higher incomes people can now afford to buy MP3 players.

2. Improvements in services available /Change in Tastes

The range of services available for MP3 users are being expanded and consumers who wish to keep up-to-date are buying MP3s e.g. increase in downloading radio broadcasts.

3. Technological advances

With improvements in technology, manufacturers are now offering new models with advanced features, thereby attracting consumers to upgrade/CD's are becoming obsolete.

4. More convenient than other available substitute goods

People prefer the convenience of MP3s. They are small and light. Music can be downloaded by the user at their convenience. Is portable and can be plugged into home entertainment devices. MP3s make it easier to share music

5. Prices of Complementary goods decreased

Downloading music, relative to buying conventional CDs, is cheaper and this makes them attractive. PCs are also cheaper attracting more people to buy both.

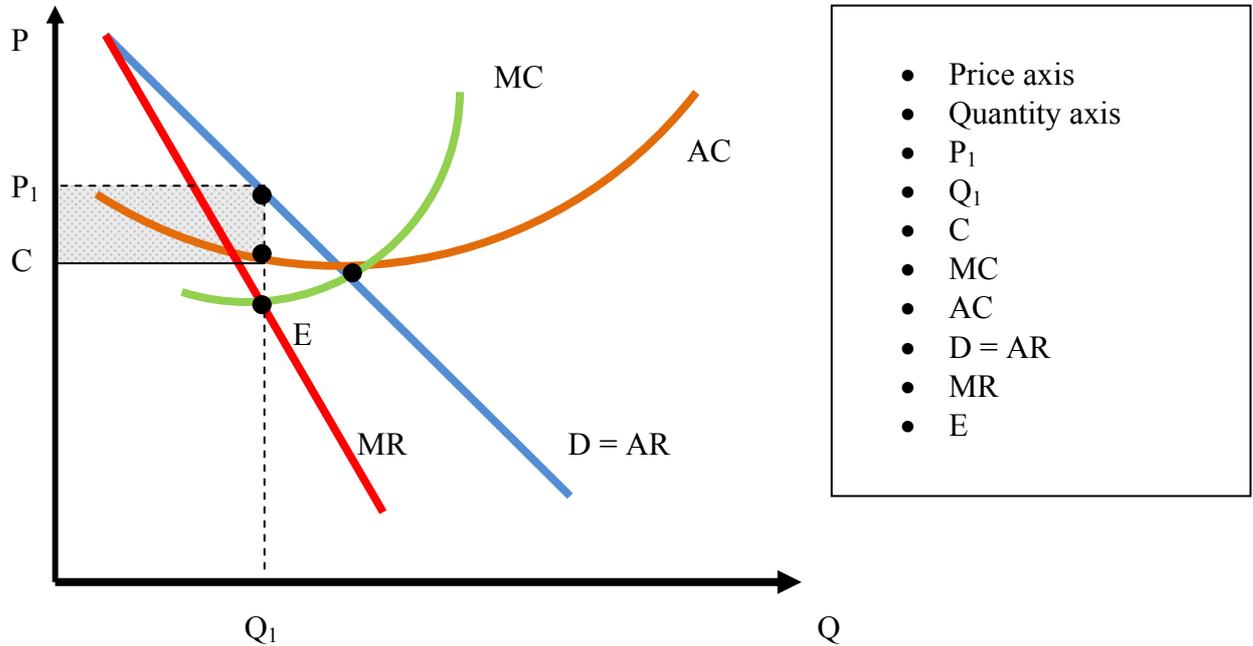
2 reasons at 7 marks each graded.

Question 2 Monopoly

- (a) Explain with the aid of a diagram, the long run equilibrium position for a monopoly firm which seeks to maximise profits. (25 marks)

Diagram: 10 marks graded

(a)



1. **Equilibrium**
 - Occurs at point E where
 - $MC = MR$ and MC is rising and cuts MR from below.
2. **Price charge & /Output produced**
 - The firm produces output Q_1 and sells it at price P_1 on the market
3. **Cost of production**
 - The cost of producing this output shown at point C.
4. **Super Normal Profits.**
 - This firm is earning SNP's – represented by the shaded area above.
 - They are earning SNP's because $AR > AC$ and
 - they can continue to earn SNP's because barriers to entry exist..
5. **Waste of Scarce Resources**
 - Because the firm is not producing at the lowest point of the AC curve it is wasting scarce resources.

5 points of explanation at 15 marks graded.

- (b) (i) Define price discrimination.
(ii) Explain **three types** of price discrimination, using suitable examples in each case (20 marks)

When the same 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 a difference in the cost of production.

Definition: 8 marks graded.

- (ii) Explain **three types** of price discrimination, using suitable examples in each case

Type	Explanation	Example
1 st Degree	<ul style="list-style-type: none"> • A monopolist attempts to remove consumer surplus. • A monopolist identifies those consumers who are prepared to pay a higher price and consequently charges them that higher price. • This type of price discrimination can occur in one-to-one confidential services. 	Visiting a medical consultant / solicitor
2 nd Degree	<ul style="list-style-type: none"> • A monopolist gives discounts for bulk buying 	Night Saver Electricity Magazine subscriptions 3 for 2 offers
3 rd Degree	<ul style="list-style-type: none"> • Consumers have different price elasticities of demand. • Consumers with inelastic demand pay a higher price than consumers with elastic demand 	Business air travel vs. leisure air travel Special rates / prices for students and old age pensioners.

3 explanations at 4 marks each graded (must include example).

- (c) (i) State and explain **three** barriers to entry facing entrants to a monopoly market.
- (ii) Explain how deregulation could affect:
- (i) Consumers of the good/service;
 - (ii) Employees in the industry;
 - (iii) Profits of existing firms.
- (30 marks)

(i) State and explain **three** barriers to entry facing entrants to a monopoly market.

1. **Legal / Statutory Monopoly**

Other firms may not be allowed into the industry because the government confers on a firm the sole right to supply a particular good or service e.g. Iarnród Éireann.

2. **Ownership of a patent / copyright**

If a firm has the sole right to a manufacturing process then no other firm can compete with it. Other firms are not allowed to use this patent until the time period for it has expired.

3. **Ownership of raw materials**

A firm may have complete control over the source of essential raw materials i.e. an oil drilling company.

4. **Large capital investment**

- In some industries the minimum size of a firm required to operate efficiently is so large that there is no room for competitors once one firm has established itself.
- Competitors are discouraged from entering because of the high initial start-up costs.

5. **Trade agreements /collusion/cartels**

By entering trade agreements with other firms, a firm can share out the market so that no competition exists within its segment of the market.

6. **Mergers / takeovers**

A firm may ensure its 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. **Monopolies based on fear, force or threats**

An individual / firm may stop other individuals/firms providing similar goods/services by means of threats/force /instilling fear into potential entrants i.e. the supply of illegal drugs.

8. **Brand proliferation**

A firm may gain monopoly power if, through its advertising, consumers are convinced that there is no suitable alternative to its particular brands.

3 barriers at 5 marks each graded.

(ii) **Explain** how deregulation could affect:

- (i) Consumers of the good/service;
- (ii) Employees in the industry;
- (iii) Profits of existing firms.

	Statement	Explanation
Consumers of the good/service	<p>Lower Prices.</p> <p>Increased availability of service.</p> <p>Increased efficiency.</p> <p>Loss of essential non-profit making services</p> <p>Loss of quality in service</p> <p>Higher prices in future</p>	<p>Increased competition / an increase in supply may cause prices to fall.</p> <p>With an increase in the number of suppliers, availability of the good/service may expand e.g. taxis in Dublin.</p> <p>With increased choice in suppliers the consumer may benefit from increased efficiency by firms.</p> <p>Non-profit making services may be discontinued by companies in an effort to reduce costs</p> <p>Quality of services may disimprove to cut costs</p> <p>There may be higher prices in the future in order to survive the competition</p>
Employees in the industry	<p>Loss of employment in existing businesses.</p> <p>Job opportunities with new suppliers.</p> <p>Changed working conditions.</p>	<p>With increased competition existing suppliers may suffer from a loss of business resulting in a loss of jobs.</p> <p>New suppliers may offer increased employment opportunities.</p> <p>The drive towards increased profits may mean that businesses may reduce the benefits to existing / new employees.</p>
Profits of existing firms	<p>Decreased profits</p> <p>Increased profits</p>	<p>If existing businesses experience a loss of business, their market share falls resulting in a loss of profits.</p> <p>If the existing businesses are able to meet the new competition and expand their business activities the opposite of the above may occur. Business may experience economies of scale.</p>

3 at 5 marks each graded – 1 effect in each case.

Question 3 Factors of Production Enterprise and Public Sector Wage Bill

- (a) (i) Define the factor of production ‘**Enterprise**’
(ii) Outline **two** characteristics which make ‘Enterprise’ a unique factor of production.
(iii) Do all entrepreneurs earn the same level of profit? Explain your answer. (30 marks)

- (i) Define the factor of production ‘**Enterprise**’

Enterprise is the factor of production that organises the other factors of production into a production unit to produce a good/service. It undertakes all the inherent risks in the hope of making a profit.

12 marks graded.

- (ii) Outline **two** characteristics which make ‘Enterprise’ a unique factor of production.

1. It can earn a loss

- It is the **only** factor that can earn a negative return (loss).
- This does not arise with the other factors of production as they are guaranteed a return

2. Returns can vary

- The returns can vary from super normal profits to losses.

3. Return is residual.

- Enterprise receives its return only after the other factors have received theirs
- It is different from the other factors since their payments are contractual / agreed in advance.

2 points at 6 marks each graded.

- (iii) Do all entrepreneurs earn the same level of profit? Explain your answer.

No, all Entrepreneurs do not earn the same level of profit.

1 mark

This is due to a rent of ability. Some are better than others and can earn a supernormal profit or an economic rent. The entrepreneur cannot be replaced easily by another because of talent and business acumen possessed. If the entrepreneur works in a more competitive industry he/she may earn lower profits than an entrepreneur in a less competitive industry.

5 marks graded.

- (b) A computer software engineer, who earns €40,000 annually in her current employment, decides to become an entrepreneur and set up her own business in which she expects to earn €75,000 annually.
- (i) What is this entrepreneur's supply price? Explain your answer.
- (ii) If the business performs as expected, will the entrepreneur earn an 'economic rent'? Explain your answer. (15 marks)
- (i) The entrepreneur's supply price is €40,000 as this is the minimum payment she needs to receive to work as a software engineer.
- (ii) Yes, if the business performs as expected the entrepreneur will earn an economic rent. She will earn €35,000. As her supply price is €40,000 and she will earn €75,000 annually as an entrepreneur, the economic rent earned is what she earns in excess of her supply price.

15 marks graded.

- (c) Public services are labour intensive and as a consequence the public sector wage bill accounts for a significant proportion of government current spending. (30 marks)
- (i) Explain why Marginal Revenue Productivity (MRP) might not be a suitable method for setting wages in Public Sector.
- Physical output is not always produced. Many jobs in public sector are services, so it is difficult to measure output, thus making it difficult to measure Marginal Physical Product (MPP) and consequently MRP.
 - The goods/services produced within public sector are often not sold on the open market or at market prices. It is therefore difficult to estimate price or marginal revenue.
 - When Capital and labour are used together it is difficult to estimate whether the extra productivity is due to labour or capital e.g. computerisation of government departments in the Civil Service.

3 points at 5 marks each graded.

(ii) Outline an alternative method for determining wage levels in the Public Sector.

1. Pay comparability:

As productivity is difficult to measure then it may be best to compare those workers in the public sector with those workers in the private sector doing similar work / with similar qualifications.

2. Benchmarking:

It was introduced by the government as a method of setting wages in the public sector. The Benchmarking Review Body examines the earnings of similar jobs in the private sector and makes a recommendation on wage increases based on this.

1 point at 7 marks graded.

(iii) Identify possible ways in which the Minister for Finance could reduce the Public Sector wage bill.

- Limit the numbers employed in the public sector e.g. ban on recruitment
- Limit pay increases in the public sector e.g. benchmarking
- Introduce a voluntary redundancy package in the public sector.
- Privatised state companies
- Reduce perks for state employees e.g. pension entitlements

2 methods at 4 marks each graded.

Question 4 National Income

- (a) (i) Define the terms **Gross Domestic Product at Current Market Prices** and **National Income**.
(ii) Explain the relationship between these two terms. (30 marks)

National Income

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

Gross Domestic Product at Current Market Prices

It is the total value of input / expenditure within the country as a result of engaging in current economic activity in one year at current market prices.

or

The output produced by the factors of production in the domestic economy irrespective of whether the factors are owned by Irish nationals or foreigners at current market prices.

1st correct answer at 12 marks graded.

2nd correct answer at 6 marks graded.

- (ii) **Explain** the relationship between these two terms.

GDP at current market prices
\pm Net Factor Income from abroad
= GNP at current market prices
Less indirect taxes
Plus subsidies
= GNP at Factor Cost
Less Depreciation
= Net National Product at Factor Cost

Relationship correctly explained 12 marks graded.

- (b) (i) State and explain three leakages from and three injections into the Circular Flow of Income in an open economy.
(ii) Outline the effect on the level of employment if leakages exceed injections. Explain your answer. (20 marks)

(i)

Injections	Leakages
Government Spending	Taxation
All money spent by the government, both current and capital. It will increase the circular flow of income	A contribution required of persons, groups, or businesses for the support of a government. It reduces spending within the economy and thus reduces the circular flow of income.
Investment Expenditure	Savings
Money invested by individuals, financial institutions and businesses/spending on capital goods. It will increase the circular flow of income.	The proportion of income not spent. It reduces spending within the economy and thereby reduces the circular flow of income.
Exports	Imports
Money spent by foreign individuals on goods/services produced within Ireland. It will increase the circular flow of income within Ireland.	Money spent by Irish citizens on goods/services produced outside Ireland. It will reduce the circular flow of income.

3 leakages and 3 injections at 12 marks graded.

- (ii) Outline the effect on the level of employment if leakages exceed injections. Explain your answer.

If leakages are greater than injections then national income will fall, leading to a drop in demand for goods and services/economic activity and thus a fall in the demand for labour. The level of employment will fall.

8 marks graded.

- (c) The Central Bank of Ireland has predicted a slower rate of economic growth for the Irish economy in 2008. Discuss the economic consequences of a slower rate of economic growth for Ireland. (25 marks)

Any 5 points (positive or negative) at 5 marks each graded.

Positive economic consequences	Negative economic consequences
<p>Lower Inflation A slower increase in GNP should reduce demand inflation as demand for goods and services begin to decline.</p>	<p>Increased unemployment A slower increase in GNP will lead to reduced demand and fewer workers will be required, increasing the level of unemployment.</p>
<p>Labour shortages The fall in demand for goods & services may decrease the demand for labour in certain sectors, easing labour shortages.</p>	<p>Falling government finances With a fall in spending, indirect tax revenue falls; less people at work will result in a decrease in direct tax revenue; expenditure on social welfare could increase.</p>
<p>Falling Demand for wage increases Expectations by workers may decrease with respect to pay increases.</p>	<p>Lower standard of living Slower growth in GNP will result in reduced wealth in the economy which means fewer goods/services bought / an increase in poverty / deterioration in state services.</p>
<p>Expectations of citizens During an economic downturn expectations fall. Citizens may revise their expectations downwards.</p>	<p>Effects on migration If job opportunities no longer exist then more people may emigrate and fewer immigrants may be attracted to the economy.</p>
<p>Less Pressure in housing market The slower growth in GNP may decrease spending power; demand for housing will begin to fall, resulting in surplus housing stock and decreasing prices.</p>	<p>Investment opportunities A slower growth in GNP may indicate the economy heading into recession and potential investors may be deterred from investing in Ireland.</p>
<p>Reduced demand for imports A reduction in GNP lowers incomes and spending power and demand for imports may fall leading to improved Balance of Payment position.</p>	<p>Funding difficulties for infrastructure The fall in state finances will make it more difficult to fund major infrastructural developments e.g. road infrastructure.</p>

Question 5 International Trade

- (a) (i) State the Law of Comparative Advantage.
(ii) Explain how both countries benefit from trade in the above example
(iii) Calculate the terms of trade for both goods. (Show all your workings) (30 marks)

Law of Comparative Advantage

The law states that a country should specialise in the production of those goods and services in which it is relatively most efficient and trade for the remainder of its requirements.

10 marks graded.

- (ii) Explain how both countries benefit from trade in the above example

Option 1

A candidate may have assumed that there are only 2 countries in the world and interprets the question as saying how the world will benefit from trade.

(In world terms 1 item of Clothing = $(30/70)$ $3/7$ of a TV or 1 TV = $(70/30)$ $2\frac{1}{2}$ items of clothing)

- With specialisation the output of clothing has decreased by 10 units or **14.3%**.
- The output of TV's has risen by 10, or **$33\frac{1}{3}$ %**
- Therefore since the increase in output of TV's of $33\frac{1}{3}$ % is greater than the decrease in output of clothing of 14.3%: the world is better off.

Option 2

South Korea

For each TV which South Korea imports, provided it gives Japan less than what it would have taken itself to produce this TV i.e. less than 3 items of clothing, then South Korea benefits from trade.

China

For each item of clothing which China imports, provided it gives South Korea less than what it would have taken itself to produce this clothing i.e. less than $\frac{1}{2}$ TV, then China benefits from trade.

Option 3

If South Korea can get more than **$\frac{1}{3}$ of a TV** for each **1 item of clothing** which it exports then it benefits from trade.

If China can get more than **2 items of clothing** for each **TV** which it exports then it benefits from trade.

8 marks graded.

(iii) Calculate the terms of trade for both goods. (Show all your workings)

Terms of Trade

South Korea

30 tonnes of clothing = 10 TV's
1 tonne of clothing = $\frac{1}{3}$ TV (opportunity cost)

China

40 tonnes of clothing = 20 TV's
1 tonne of clothing = $\frac{1}{2}$ TV (opportunity cost)

$$\boxed{\frac{1}{3} \text{ TV} < 1 \text{ Clothing} < \frac{1}{2} \text{ TV}}$$

South Korea

30 tonnes of clothing = 10 TV's
3 tonnes of clothing = 1 TV (opportunity cost)

China

40 tonnes of clothing = 20 TV's
2 tonnes of clothing = 1 TV (opportunity cost)

$$\boxed{2 \text{ Clothing} < 1 \text{ TV} < 3 \text{ Clothing}}$$

12 marks graded.

(b) Discuss the economic consequences of a decrease in the value of the US dollar (\$) relative to the euro (€) for the Irish economy. (20 marks)

1. Imports Cheaper

Price of imports from US has decreased.

This has resulted in a lower import bill for Irish producers / increase in imports from the US / more Irish people holidaying in the US.

2. Exports Dearer

Price of exports from Ireland to US has increased and therefore harder to sell.

This has resulted in reduced exports to the US / less Americans visiting Ireland.

3. Employment

With a reduction in exports, employment in those industries which depend on Irish exports to the US will suffer e.g. Waterford Glass PLC.

4. Slowdown in rate of economic growth

With the loss of jobs, spending within the economy falls. Expenditure by the government on social welfare increases. Combined these will negatively impact on the rate of economic growth.

5. Commodities priced in \$s

The strength of the €/€ has shielded Ireland from price increases in commodities which are priced in \$ e.g. oil.

6. US Investment in Ireland Discouraged

It will be more costly for US firms to purchase capital goods/invest in Ireland.

4 points at 5 marks each graded.

- (c) It is becoming more difficult to attract Foreign Direct Investment (multinational companies) into Ireland. Discuss the economic reasons for this development. (25 marks)

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 exports less competitive.

3. Infrastructural problems

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

4. Assess ion of new EU member states

- Since May 2004 many new countries joined the EU and these countries now offer companies access to the EU market/availability of cheaper labour/access to new markets/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 for companies to operate e.g. protection of the environment may face less protection.

6. Advances in International Communication

- Advances in global communications have made it possible for firms to locate offices in other places 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 e.g. credit card companies/insurance companies.

5 points at 5 marks each graded.

Question 6 Taxation

- (a) In each of the following distinguish between the terms:
 (i) 'progressive taxation' and 'regressive taxation'
 (ii) 'tax avoidance' and 'tax evasion' (20 marks)

Progressive taxation	Marks	Regressive taxation	Marks
One that takes proportionately more in tax as a person's income increases	5	One that takes proportionately more in tax as a person's income decreases	5
Tax avoidance		Tax evasion	
Arranging ones affairs within the law so as to minimise tax liabilities.	5	Reducing tax liabilities by making false returns or no returns.	5

- (b) (i) Outline the main functions of taxation. (30 marks)

1. Finance Government Activities

To finance all government activities e.g. running of civil service, wages of Public Sector workers.

2. Economic Objectives

To achieve economic objectives: reducing inflation, favourable balance of payments.

3. Redistribution of National Wealth

To redistribute the national wealth through transfer payments/social welfare payments.

4. Automatic Stabiliser

It acts as an automatic stabiliser for the economy. It helps to avoid wide fluctuations in the economic cycle by automatically taking more tax when economy is doing well and taking less when economy is performing poorly.

5. Social objectives

To achieve social objectives e.g. discourage smoking, drinking / decrease pollution/damage to environment.

6. Promote enterprise

To help industry through subsidies/grants and other services can be provided to help industry and encourage enterprise e.g. County Enterprise Boards.

4 points at 4 marks each graded.

- (ii) Explain, using an example, the meaning of the term 'incidence of tax'.

Incidence of tax refers to the person who actually bears/pays the tax.
This is not necessarily the person on whom the tax was levied or placed.

Example: If the government decides to increase a tax for a producer e.g. electricity and the company passes on the tax to the consumer in the form of higher electricity prices then the incidence of tax is on the consumer because the consumer ends up paying most of the tax.

Explanation and example: 6 marks graded.

- (iii) Outline two reasons why the Minister for Finance regularly taxes goods such as alcohol, cigarettes and petrol in the Government's annual budget.

1. Inelastic demand

These goods have inelastic demand therefore the quantity demanded will only reduce slightly because of the increase in tax. The government will therefore collect more tax revenue

2. Goods with Social Consequences

The consumption of these goods has other consequences e.g. health issues with the use of tobacco and alcohol/social problems from excess alcohol/environmental damage. The government can use the tax system to try to discourage the consumption of these goods/could use the revenue to provide for extra healthcare etc.

3. To discourage private car transport and encourage public transport

By making petrol dearer, the use of public transport may be more attractive and by encouraging its use, the environment is protected by reducing emissions.

4. To discourage/limit tax evasion

Since goods like alcohol, tobacco and petrol have inelastic demand people continue to purchase these goods and by including the tax in the price it makes it more difficult to evade taxes on these products.

2 reasons at 4 marks each graded.

- (c) (i) There has been a shift in focus by the Government away from direct taxation to indirect taxation. Discuss two economic advantages and two economic disadvantages of this situation for the Irish economy. (25 marks)

Economic Advantages	Economic Disadvantages
<p>Evasion is more difficult As the indirect tax is included in the selling price of the good or service it is impossible to evade.</p>	<p>Will increase inflation Indirect taxes raise the prices of goods and services and hence the cost of living, possibly causing demands for further wage increases.</p>
<p>No disincentive to work A taxpayer can adjust their expenditure patterns to reduce their tax liability and thus it does not act as a disincentive to work unlike direct taxes.</p>	<p>Regressive 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 goods/services.</p>
<p>Convenient for taxpayer They are included in the selling price and paid when the good/service is bought.</p>	<p>Revenue collected is not as certain The revenue to be collected is not as predictable as that from direct taxation. This may hinder the government's financial planning.</p>
<p>Used by government to change consumption patterns 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 demand.</p>	<p>Burden of collection passed to retailers/traders These now act as revenue collectors and procedures must be put into practice to collect, record and remit the revenue, increasing costs for the firms.</p>
<p>Economic The cost of collection is borne by retailers and producers not by the state.</p>	<p>Inequitable Indirect taxes ignore ability to pay. A person who earns a high income but doesn't drink, smoke or drive a car will pay a lower proportion of his/her income in tax than a person on the same income who consumes these commodities.</p>
<p>Fewer complaints from taxpayers As the tax is included in the selling price the taxpayer may be unaware of the rate of tax s/he is paying and so the government may face less criticism than if rates of direct taxation were increased.</p>	
<p>Acts as a built-in stabiliser As the economy expands spending rises and so too will the revenue collected from taxation.</p>	

2 advantages at 4 marks each and 2 disadvantages at 4 marks each graded.

- (ii) Ireland must reduce its 'carbon footprint' (i.e. the level of greenhouse emissions from fossil fuels by 20% over the next 12 years.

Explain **two** ways in which the tax system could be used to meet this target.

1. Environmentally Friendly Vehicles

The government could give tax exemptions for environmentally friendly vehicles such as electric cars, hybrids, and vehicles using bio-diesel.

2. Vehicle Registration Tax

A reduction in Vehicle Registration Tax could be given for vehicles with low CO₂ emissions and an increase in Vehicle Registration Tax for high emission vehicles.

3. Road Tax

Increase the amount of road tax paid to discourage the use of vehicles.

4. Public Transport

Reduce any taxation on prices paid for public transport.

5. Polluter Pays

Introduce a polluter pays principle/tax those who are environmentally unfriendly at a higher rate e.g. weight per bin

6. Offer tax incentives to firms to develop/supply alternative sources of energy.

The government has increased expenditure in this area with the long term aim of reducing dependence on fossil fuels.

7. Offer tax incentives to households to switch to alternative sources of energy.

The government could increase the tax rebates to those households who switch to solar energy; wood pellet heating etc.

8. Increase Excise Duty on Fuel

Increase taxes on petrol, diesel and home heating oil to encourage people to change their consumption patterns towards more environmentally friendly solutions.

2 points: 5 marks graded + 4 marks graded.

Question 7: Privatisation, Regional Development and Population

- (a) (i) Explain the term ‘Privatisation’ and state two examples of companies that have been privatised in Ireland. (30 marks)

The term ‘privatisation’ is used to describe the sale or transfer of public sector assets to the private sector.

6 marks graded.

Examples: Aer Lingus, Eircom, Irish Life, B & I Ferries, Greencore.

2 examples at 2 marks each

- (ii) Outline two arguments in favour of Privatisation and two arguments against Privatisation for the Irish economy.

Arguments in favour	Arguments against
<p>1. Improved quality / choice of services. Privatised firm may improve the quality / efficiency / choice of the service provided.</p>	<p>1. Loss of non-profit making services Non-profit making services may be discontinued by the company in an effort to reduce costs.</p>
<p>2. More competitive prices. Consumers may be offered more competitive prices on goods / services.</p>	<p>2. Standards of service The services provided by the new company may deteriorate in an effort to save costs.</p>
<p>3. Continuity of supply The newly privatised companies will have access to new sources of funds and as they are not subject to government interference their long term prospects for survival may improve, ensuring continuity of supply for consumers.</p>	<p>3. Preference to meet shareholders demands. Greater emphasis might be placed on meeting the expectations of shareholders rather than improving the quality of the service for consumers. Firm may charge for services which were considered ‘free’.</p>
<p>4. Employment opportunities If the new firm increases its market share then this may result in a growth in employment within the industry / additional job security.</p>	<p>4. Loss of jobs / reduced job security / increased social welfare bill There may be a loss of jobs through rationalisation of services, leading to higher social welfare spending.</p>
<p>5. More rewards/Incentives for innovation. Employees may reap more rewards for their innovations within the privatised industry e.g. higher bonuses etc.</p>	<p>5. Curtailment in Pay / Pensions increases / working conditions The new owners may limit the pay / pension increases due to its employees /may change its employees' conditions of employment resulting in a worsening of these.</p>
<p>6. Revenue from sale may help reduce current / future taxes/opportunity cost The government could use the revenue from the sale of the firm to help reduce tax rates in Ireland, either direct or indirect. Reduction in borrowing.</p>	<p>7. Loss of a valuable state resource This company has been financed by taxpayers in the past. With its sale, taxpayers now lose a valuable asset which they once owned.</p>
	<p>8.Costs of the Sale All costs in preparation for the sale such as legal work must be paid for by the taxpayer e.g. Aer Lingus</p>
	<p>9. Foreign ownership of Irish Companies Overseas buyers can become owners of a previously Irish company and so control of the asset can go outside the state</p>
2 at 5 marks each graded.	2 at 5 marks each graded.

(b) One of the economic aims of the government is 'Balanced Regional Development'. (25 marks)

(i) Explain the meaning of the underlined term.

Government identifies and targets regions which are disadvantaged or economically depressed and then implements policies which positively discriminate in favour of these regions

5 marks graded.

(ii) Outline two policies which the government could implement to promote regional development.

1. Decentralisation of state bodies / Government departments

By placing state bodies in these regions additional income is generated here through the multiplier effect, promoting economic development.

2. Grants/Tax Incentives

If additional grants and tax incentives are provided to industry within the regions then more firms will locate here promoting development.

3. Investment in the infrastructure

If investment in the social infrastructure takes place, then the improvements will make these regions more attractive to live in, boosting the working population and making the communities viable places to live, work and invest in i.e. the Ballymun Regeneration Project / Regeneration of Moyross and Southhill in Limerick.

4. Upgrading of power supplies

The lack of an adequate power supply in regions hinders the location of some types of industry i.e. the north east. If this situation were remedied then industry could locate there.

5. Upgrading of 3rd Level Training and Educational facilities

The provision of adequate 3rd level educational facilities is a pre-requisite for attracting high value- added businesses to regions.

The availability of courses in IT's and other College's in regional areas encourages enterprise in these areas, further facilitating development.

6. Improved Access to and from the regions

Tourist organisations in the regions cite the lack of direct (cheap) international flights into these regions as a major deterrent to attracting tourists into these regions. Investment in the road and rail network will improve access for industry.

7. Easing of planning restrictions in building residential property

Recently the Minister for the Environment announced plans for the easing of planning restrictions on the building of residential property. This will encourage more people to live and work in these areas, thereby boosting economic activity.

8. Providing Leader Programmes

Such programmes support local communities in developing their localities. By identifying opportunities and aiding in research, training and promotion these programmes encourage initiative and aid economic development.

2 points at 5 marks each graded.

- (iii) ‘Balanced Regional Policy has an opportunity cost’. Explain this statement, using an example to support your answer.

This statement means that when the government targets certain areas for spending and development, other parts of the country and economy may lose out.

Explanation: 5 marks graded.

If the government gives grants or tax incentives to a company to locate in the North West of Ireland, this means that there will be less money for government to spend on other state services such as education.

Example: 5 marks graded.

- (c) The ‘Birth Rate’ in Ireland shows an increase over previous years (CSO Census 2006) (20 marks)

- (i) Explain the meaning of the underlined term.

The Birth Rate is the number of live births per 1000 of the population. **5 marks graded.**

- (ii) Outline **three** economic implications of the changing structure and size of the Irish population.

1. Increased demand for goods & services / Larger domestic market

A rising population leads to increases in the demand for goods & services within the country. A rising population leads to a larger domestic market, possibly leading to increased opportunities for investment. Firms increasing production may benefit from economies of scale.

2. Increased pressure on state services

- A rising population puts further pressure on essential state services e.g. health services, schools.
- If the increase in population had not been planned for by the government then shortages may develop in certain sectors i.e. housing, education, social services etc.

3. Increased pressure on the country’s infrastructure

- Greater pressure is exerted on the infrastructure of the country leading to bottlenecks e.g. increased traffic jams.
- The government will have to plan for the provision of more schools and facilities for younger population and more health facilities for the older population.

4. Better utilisation of state services

If the population lives in under populated areas of the country then services available may be more fully utilized i.e. transport services, schools etc.

5. Dependency ratio

- If the population increase is due to immigration then numbers joining the labour market may increase making it important for the government to prioritise the creation of employment. The increased numbers in the labour force will lower the dependency ratio and lead to increased tax revenues for the state.
- If the increase in population is due to the increased birth rate then there will be a higher dependency ratio, an increase in the percentage of the population which is economically inactive and greater demands on government funds.

6. Land / Property values

As population density increases, available land / property becomes scarce thus leading to increased prices for land/property.

3 points at 5 marks each graded.

Question 8 Money & Banking, Inflation

(a) (i) Explain, with the aid of an example, how it is possible for banks to create credit. (30 marks)

1. Commercial banks accept cash deposits from their customers e.g. say €100, for safekeeping.
2. These banks know from experience that their customers will only demand back a small amount of these deposits in cash - say 10% because of their use of cheques as an acceptable method of payment.
3. So they now have surplus cash with which to give loans - €90.
4. The amount of loan they give is related to, but in excess of their cash deposits and is based on their reserve ratio.

The amount it can create is calculated as follows:

$$\text{Increase in credit} = \text{Increase in Cash Deposits} \times \frac{1}{\text{Banks Reserve Ratio}}$$

Plus a worked example of above.

OR

Alternative solution

Balance Sheet of a Bank

<u>Assets</u>		<u>Liabilities</u>	
Cash lodged by X	€100	X's deposit	€100
Total Assets	<u>€100</u>	Total Liabilities	<u>€100</u>

Balance Sheet of a Bank

<u>Assets</u>		<u>Liabilities</u>	
Cash lodged by X	€100	Deposits	€100
Loan	€900	New Deposits	€900
Total Assets	<u>€1000</u>	Total Liabilities	<u>€1000</u>

Plus explanation

1. Mr. X lodges €100 into the bank
2. It knows that only 10% is demanded in cash.
3. It has enough cash to support total deposits of €1,000. The bank can create another €900 in deposits. It does this by giving out loans of €900.
4. Only 10% of its total deposits will be demanded in cash. So €100 cash is sufficient for this purpose. This is shown in the new balance sheet.

Explanation plus example: 16 marks graded.

- (ii) Outline how a desire by banks to reduce their level of bad debts might affect their ability to create credit.

Reducing bad debts would reduce the banks' ability to create credit as they would become more cautious about lending and would therefore be holding more cash. If banks are not issuing loans this means less credit is being created.

Explanation 4 marks graded.

- (iii) Explain **two other** factors which could affect their ability to create credit

1. Availability of cash deposits

A bank can only give loans provided that it can attract cash deposits.

2. Customers' demands for cash

The bank must keep sufficient cash to be able to meet the demands of its customers.

3. European Central Bank guidelines

Commercial banks must follow the guidelines of the ECB.

4. Demand for loans by customers

A bank is limited in the amount of loans it creates by the demand for loans. In a recessionary period the demand for loans will fall.

2 factors at 5 marks each graded.

(b) Irish citizens experienced an increase in the rate of price inflation during 2007. (20 marks)

(i) Explain the underlined term

Price Inflation is defined as a sustained increase in the general level of prices.

Explanation 4 marks.

(ii) Discuss the economic effects of this development on the Irish economy.

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, experiencing 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 that of our trading partners it will result in a loss of competitiveness in our exports abroad possibly lowering our exports.

4. Loss of employment

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

5. Government Finances

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

6. Savings discouraged/Consumption Encouraged

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.

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 different sectors of the population.

While those at work may seek a wage increase to compensate for the drop in their living standards, those on fixed incomes must wait for the government to decide to adjust their payments. This widens the gap between these sectors.

9. Pressure on social partnership/ industrial relations unrest

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

10. Balance of Payments problems:

If the volume of exports falls and the volume of imports rises the Balance of Payments position will deteriorate.

11. Pressure on the ECB: Rising inflation may force the ECB to take corrective action to control it.

12. Uncertainty: Rising inflation rates in Ireland creates uncertainty for investment decisions.

Makes business planning and profit calculation difficult.

4 points at 4 marks each graded.

- (c) For a composite (weighted) price index covering three categories of expenditure given in the following table, calculate the index for the current year. The base year is 100.
(Show all your workings). (25 marks)

Category	Prices of Item(s) Base Year	Calculation of Simple Price Index x Weight
	€	
Food	20	$\frac{24.50 \times 100}{20} = 122.50 \times 40\% = 49.00$
Clothing & Footwear	42	$\frac{40.00 \times 100}{42} = 95.23 \times 25\% = 23.80$
Other Items	30	$\frac{36.00 \times 100}{30} = 120.00 \times 35\% = 42.00$
Price Index for the Current year		114.80

1. Calculation of SPI for each category: 15 figures at 1 mark each = **15 marks**
 2. Answers: 3 figures at 2 marks each = **6 marks**
 3. Correct Answer: = **4 marks**
 Total Marks = **25 marks**