<table>
<thead>
<tr>
<th>Scéimeanna Marcála</th>
<th>Scrúduithe Ardteistiméireachta, 2003</th>
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</thead>
<tbody>
<tr>
<td>Eacnamaíocht</td>
<td>Ardleibhéal</td>
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<tr>
<td>Marking Scheme</td>
<td>Leaving Certificate Examination, 2003</td>
</tr>
<tr>
<td>Economics</td>
<td>Higher Level</td>
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</table>
There is no suggestion that the enclosed notes are exhaustive or definitively complete. They are not model or suggested answers.

Further relevant points presented by candidates will be marked and rewarded on their merits.

The detail required in any answer is determined by the context and the manner in which the question is asked and by the number of marks assigned to the answer in the examination paper. Requirements may therefore vary from year to year.
1. A regressive tax is defined as:
   • One that takes proportionately more in tax as a person's income decreases or
   • One which takes a higher proportion in tax from low income earners than from high income earners or
   • One that as income rises a decreasing proportion is taken in tax.
   • Example 1: VAT / Example 2: Excise duties / Example 3: Refuse charges
   • Example 4: Licence form of taxes i.e. TV licence / Car Tax

   **Correct definition: 12 marks graded + 2 examples**

2. FOUR economic aims of government
   1. Achieve Full employment.
   2. Reduce price inflation – limit price increases.
   3. Achieve moderate economic growth.
   5. Control government expenditure/finances.
   6. Reduce borrowing / control the national debt as a percentage of GDP.
   7. Reduce taxation levels / achieve taxation equity.
   8. Promote balanced regional development.
   9. Improve infrastructure.
   10. Improve state services: –health/education services / achieve a just social policy.
   11. Achieve an equitable distribution of income / achieve a just social policy.
   12. Protect the value of the domestic currency (non-euro zone countries).

   **4 aims at 4 marks each = 16 marks**

3. Monetary Policy is defined as
   Those actions by the ECB, which influence the money supply, interest rates or the availability of credit.

   TWO measures by which the ECB implements monetary policy within the euro zone countries:
   1. Monitoring the growth of the money supply (relative to its value)
   2. Altering interest rates.
   3. Engaging in Open Market Operations
      (incl. Main refinancing operations (MRO’s) & Longer-term refinancing operations (LTRO’s)
   4. The use of Standing Facilities
      (the marginal lending facility and the deposit facility)
   5. Minimum Reserve Requirements.

   **Correct definition: 12 marks graded + 2 examples**
4. The term ‘Balance of Payments on Capital Account’ means:

This is a record of a country’s inflow and outflow of capital/items of a non-recurring nature
This is a record of a country’s receipts and payments for capital items

TWO examples of items that may appear in it are:
1. Investments by foreign companies/residents in Ireland.
2. Investments by Irish companies/residents abroad.
3. Borrowings/grants from foreign sources.

The examples given by candidates may be stated as follows:

**Capital account**
1. Amounts receivable under the EU Regional Development Fund & Cohesion Fund.
2. Migrants transfers (net worth of immigrants and emigrants)
3. Acquisitions and disposals of non-produced, non-financial assets (patents, copyrights)

**Financial account**
1. Transactions in foreign financial assets and foreign liabilities.
2. Direct investment i.e. net investment by foreign companies in Ireland.
3. Portfolio investment: acquisition & disposal of equity and debt.
4. Other investment: loans, currency & deposits, financial derivatives & other accounts receivable and payable.
5. Reserve assets: qualifying assets under the control of the Central Bank of Ireland

**Correct definition: 12 marks graded + 2 examples**

5. THREE economic reasons why entrepreneurs are important to the development of an economy:
1. Organise the other factors of production into productive units.
2. Decide which goods and services are to be produced and in what quantities.
3. Decide on the prices to be charged for goods and services hoping there will be a demand at these price levels.
4. Encourage further investment in the economy, if successful: by investing both money and skills in the business and making a profit they may encourage further investment in the economy.
5. Provide an investment outlet for savers.
6. May improve the Balance of Payments: if some of the wealth produced is exported.
7. Relieve the government of the need to become involved in business by creating a healthy private sector.
8. Generate revenue for the government through taxation revenues.
9. Help create employment: by establishing businesses they create jobs.
10. Introduce competition into the market place thus leading to more efficient use of scarce resources.

3 reasons: 6 + 5 + 5 marks = 16 marks

6. Using the diagram, explain how higher consumers’ incomes (other factors unchanged) may affect the demand curve for mobile phones in Ireland.

Complete Diagram

As consumers’ incomes grow, the increased purchasing power will give ‘new’ consumers the ability to purchase mobile phones, and/or existing customers the ability to update their models.

Correctly labeled diagram + Explanation: 17 marks graded

7. FOUR economic assumptions used for analysing consumer behaviour:
1. The consumer has a limited income.
2. The consumer aims to gets maximum satisfaction / utility from that income.
3. The consumer acts rationally.
4. The consumer is subject to the Law of Diminishing Marginal Utility.

4 points: 5 + 4 + 4 + 4 = 17 marks
8. Social benefits are defined as:

The benefits/advantages, which accrue to society as a whole as a result of an individual / firm consuming / producing a commodity [which are not measured by the price system]

TWO examples of social benefits which may arise from the Irish Government’s payment of student fees for most third level colleges in Ireland:

(a) Improve the skills/ quality/ productivity / mobility of the labour force
(b) Acts as an incentive for attracting foreign industry to Ireland.  
(c) Possible increase in present / future living standards.  
(d) May lead to an increase in future tax revenues for the state.  
(e) Fairer distribution of wealth: low-income student may be able to break the poverty trap.

Correct definition: 12 marks graded and 2 examples

9. A firm wishes to attract more labour. In order to increase its labour force from 7 to 8 employees the firm must increase the weekly wage rate from €250 to €300 per worker. Calculate the firm’s marginal cost of labour. Show all your workings.

\[
\begin{align*}
7 \times €250 &= €1,750 \\
8 \times €300 &= €2,400 \\
\text{Marginal Cost of labour} &= €650 \\
\end{align*}
\]

\[
\begin{align*}
€50 \times 7 &= €350 \\
+ €300 &= €650 \\
\text{Marginal Cost of labour} &= €650 \\
\end{align*}
\]

6 correct figures at 2 marks each = 12mks + 5 marks for correct answer = 17m

4 correct figures at 3 marks each = 12mks + 5 marks for correct answer = 17m
Question 1  Oligopoly

(a) Outline THREE key features of an oligopolistic market.  

1. Few Sellers dominate the industry.  
   Because of this sellers can influence the selling price of the commodity/or the output sold.

2. Interdependence of firms.  
   Firms in oligopoly do not act independently of each other. They will each take into the account the likely reactions of their competitors; hence prices tend to be rigid.

3. Product Differentiation occurs.  
   The commodities, which the firms sell, are close substitutes. Firms will engage in advertising to persuade consumers to buy their product rather than competitors’ products.

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

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

6. Non-price competition is more common than price competition.  
   Due to fear of how their competitors will react firms tend not to engage in price competition but rather engage in non-price competitive measures to gain consumers from rival firms.

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

3 features x 6 marks each graded  
Must state TWO of the first THREE listed points.
Examples:
Petrol/Oil companies - Shell, Statoil, Esso etc.
Motor Car Manufacturers - Ford, General Motors, Nissan etc.
Retail Banks - AIB, Bank of Ireland etc.
Supermarkets - Tesco, Dunnes Stores, Superquinn etc.
Detergent Manufacturers - Proctor & Gamble, Smith & Nephew.

1 example x 2 marks = 2 marks

(b) With the aid of ONE clearly labelled diagram:
(i) Explain the shape of the demand curve facing a firm in oligopoly.
(ii) Explain the relationship between this demand curve and the firm's marginal revenue curve.
(iii) Explain the long run equilibrium position of this firm. (40 marks)

Diagram

<table>
<thead>
<tr>
<th>Axes</th>
<th>2 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinked D/C:AZY</td>
<td>2 marks</td>
</tr>
<tr>
<td>MR</td>
<td>2 marks</td>
</tr>
<tr>
<td>MC</td>
<td>2 marks</td>
</tr>
<tr>
<td>Equilibrium: P1 &amp; Q1</td>
<td>2 marks</td>
</tr>
</tbody>
</table>

(i) Shape of the demand curve: 12 marks graded
- If a firm increases its price other firms leave their prices unchanged - so this firm will lose many customers. This firm faces an ELASTIC D/C - demand curve AB.
- If a firm lowers its price other firms will match this price decrease - the firm will gain few additional customers. Hence the firm faces an INELASTIC D/C - demand curve XY.
- If the price leader sets price at point Z then the firm faces a distinct demand curve: AZY, kinked at point Z.
(ii) Relationship between this D/C and the firm’s marginal revenue curve: 8 marks graded

- Because the D/C is kinked the firms MR curve consists of 2 distinct parts
- and is constant between point D and point E, so irrespective of what happens to costs the firms revenue does not change.

(iii) The long run equilibrium position of this firm: 10 marks graded

- Equilibrium is achieved where (a) MC = MR and (b) MC is rising.
  This occurs at point G in the diagram.
- The firm will produce Q1 and sell this output at price P1.

Reference to profits position
As barriers to entry may exist this firm can earn SNP’s – if AR exceeds AC.

or
Reference to Price Rigidity
Should costs rise between points D and E the market price tends to remain constant at P1.

(c) Explain THREE methods by which firms in oligopolistic markets may collude. (15 marks)

1. Pricing policy / Limit Pricing
   One firm, with the tacit agreement of others, could reduce prices forcing unwanted entrants out of the industry.

2. Production/output policy
   Firms could join together to limit output to certain agreed amounts.

3. Sales Territories.
   Firms could divide up the market between them and agree not to compete in each other’s market segment.

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

3 x 5 marks each graded
**Question 2 Elasticity**

(a) Define (i) price elasticity of demand and (ii) cross elasticity of demand. In each case, state the formula by which it is measured. (20 marks)

(i) Price Elasticity of Demand measures:
- the percentage / proportionate change in the quantity demanded for a good caused by the percentage / proportionate change in the price of that good.

**Formula:** \[
\frac{\Delta Q}{P_1 + P_2} \times \frac{P_1 + P_2}{Q_1 + Q_2}
\]

*Definition + Correct Formula: 10 marks graded*

(ii) Cross Elasticity of Demand measures:
- the percentage / proportionate change in the demand for one good caused by the percentage / proportionate change in the price of other goods.

**Formula:** \[
\frac{\Delta Q_X}{Q_{X1} + Q_{X2}} \times \frac{P_{Y1} + P_{Y2}}{P_{Y1} + P_{Y2}}
\]

*Definition + Correct Formula: 10 marks graded*

(b) When the price of good X is €27 the quantity demanded of good Y is 1,200 units. When the price of Good X falls to €23 (the price of Good Y unchanged) the quantity demanded of good Y falls to 800 units.

(i) Using the cross elasticity of demand formula, calculate the cross elasticity of demand for Good Y. Show all your workings.

(ii) Is good Y a substitute for or complement to good X? Explain your choice. (25 marks)

(i) **Formula:** \[
\frac{\Delta Q_X}{Q_{X1} + Q_{X2}} \times \frac{P_{Y1} + P_{Y2}}{P_{Y1} + P_{Y2}}
\]

\[
\begin{align*}
\frac{-400}{400} & \times \frac{27 + 23}{1200 + 800} \\
& = +2.5
\end{align*}
\]

6 correct figures at 2 marks each: **12 marks**/Correct Sign: **2 marks**/Correct answer: **4 mks**
(ii) Good Y is a substitute good.

This means that as the price of good X decreased, consumers switched from Good Y to the cheaper alternative, Good X.

(c) A firm has the following price elasticities of demand for two goods, Good X and Good Y:

<table>
<thead>
<tr>
<th>Good X: -2.0</th>
<th>Good Y: -0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Good</td>
<td>Normal because it has a – PED.</td>
</tr>
<tr>
<td>Comment</td>
<td>Elastic because PED &gt; 1</td>
</tr>
<tr>
<td>Price change</td>
<td>Decrease price</td>
</tr>
<tr>
<td>Effects on demand</td>
<td>Demand will rise</td>
</tr>
<tr>
<td>Comparison</td>
<td>Because: the % increase in demand exceeds the % decrease in price</td>
</tr>
<tr>
<td>Effect on Total revenue</td>
<td>This will increase</td>
</tr>
</tbody>
</table>

What changes, if any, should the firm make in the selling price of each of the goods to increase overall revenue? Explain your answer.
In cases where candidates assumed that the sign for Good X and Good Y was +

<table>
<thead>
<tr>
<th>Type of good</th>
<th><strong>Good X: + 2.0</strong></th>
<th><strong>Good Y: + 0.5</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Giffen because</td>
<td>Giffen because</td>
</tr>
<tr>
<td></td>
<td>It has a + PED</td>
<td>It has a + PED</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>as $P \uparrow \rightarrow Q_D \uparrow$</td>
<td>as $P \uparrow \rightarrow Q_D \uparrow$</td>
</tr>
</tbody>
</table>

| Comment        | Elastic because PED > 1 | Inelastic because PED < 1 |

| Price change   | Increase price         | Increase price         |
| Effects on demand | Demand will rise     | Demand will rise     |
| Effect on Total revenue | This will increase | This will increase |

**15 marks graded**
**15 marks graded**
(a) (i) State and explain **FOUR** factors which affect a consumers’ demand schedule, other than the price of the good itself.
(ii) Explain the economic rationale for assuming that a person’s demand curve for a normal good slopes downward. (30 marks)

(i) The factors, which influence a consumer's demand schedule:

\[ DA = f (POG, Y, T, E, G, U) \]

(a) the prices of complementary and substitute goods
If the price of a complementary good rises then demand for this good falls - e.g. an increase in the price of petrol will result in a drop in the demand for large cars.
If the price of a substitute good rises then demand for this good rises, as it has become relatively cheaper.

(b) the income of the consumer
For most goods as income rises the demand increases and vice versa e.g. smaller quantities of goods are bought when a person becomes unemployed.

(c) the consumers' tastes or preference for a commodity
When a commodity comes into fashion or into season there is an increase in the quantity demanded at each price. Advertising attempts to influence taste in favour of the good.

(d) The expectations concerning future prices, availability of income
If a consumer expects that future prices are likely to be greater than they are at present, then there will be an increase in the demand for the good at each price.

(e) government regulations
If the government initiates a programme to curtail consumption of a particular product then it may affect the demand for a good e.g. a health education campaign to curtail cigarette consumption.

(f) Unplanned factors
If there was a sudden heatwave this may result in an increase in the demand for suncream / ice cream etc.

*4 points x 6 marks graded*
(ii) The reason a person’s demand curve for a normal good slopes downward:

as the price of a good falls the consumer buys more of this cheaper good, because
the marginal utility per cent spent on this good increases

and the consumer aims to maximise his/her total utility.

6 marks graded

(b) For something to be considered an economic good, it must possess certain characteristics. State and explain THREE of these characteristics. (20 marks)

(i) It must command a Price.
Supply must be scarce in relation to the demand for it.
If not people will not be prepared to pay a price to obtain it.

(ii) It must provide Utility.
The commodity must provide a feeling of satisfaction.
Anything which is a nuisance or irritant does not, and so is not an economic good.

(iii) It must be transferable.
For an item to be considered an economic good it must be capable of being transferred from one person to another.

3 points: 7 +7 + 6 marks graded
(c) A consumer spends all income on two goods, Good A and Good B. Both goods are normal goods but they are not complementary goods. The price of Good A is reduced and the price of Good B remains unchanged. The consumer continues to spend all income on the two goods. Distinguish between the substitution effect and the income effect of the price reduction in Good A.

(25 marks)

<table>
<thead>
<tr>
<th>Substitution Effect</th>
<th>Income Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand for Good A:</td>
<td>Demand for Good A:</td>
</tr>
<tr>
<td>Increases</td>
<td>Increases</td>
</tr>
<tr>
<td>Good A is now relatively cheaper. Hence the consumer is getting increased marginal utility for this good.</td>
<td>Consumer has additional income, due to the reduction in price of Good A. As good A is a normal good the demand for this good will increase.</td>
</tr>
</tbody>
</table>

13 marks graded | 12 marks graded

**Question 4  The Labour Market**

(a) Define each of the following:
   (i) Supply price of a factor of production.
   (ii) Transfer earnings.
   (iii) Economic Rent.  

Supply Price:
The minimum payment necessary to bring a factor into use and maintain it in that particular use.  

7 marks graded

Transfer Earnings:
The earnings of a factor in the next best alternative employment. or what a factor must receive to keep it in its present use & prevent it from transferring to another use.  

7 marks graded

13
Economic Rent:  
Any earnings of a factor **above its supply price.**  

(b) A principal factor influencing the demand for labour by an individual firm is the **Marginal Revenue Productivity of Labour** (MRP).  
   (i) Explain what is meant by the underlined term.  
   (ii) Discuss the factors, other than MRP, which influence the demand for labour by an individual firm.  

(i) **MRP of labour**  
the extra revenue earned when an additional unit of labour is employed  

(ii) Discuss the factors, other than MRP, which influence the demand for labour by an individual firm.  

1. The wage rate.  
2. Demand for the firm’s output.  
3. Price of capital relative to labour.  
4. State subsidies paid to the firm.  
5. Taxation Rates on the firm’s profits.  
6. Payroll taxes.  
7. Availability of technology.  
8. Trade union involvement.  

**The Wage Rate**  
If the wage rate the worker is seeking is higher than the revenue that the worker generates then this worker will not be demanded.  

**Demand for output**  
If demand for the firm’s output increases then this may lead to an increased demand for labour.  

**Price of other factors of production (including capital)**  
Prior to employing more labour the firm would compare the cost of the additional labour with that of other factors of production available to determine which is the most competitive.
State subsidies
If the state were paying subsidies for the hiring of additional labour then this would make labour more competitive and increase demand.

Taxation Rates on the firm’s profits
If the profitability of a firm is reduced by higher tax on companies' profits then this may affect a firm’s decision to hire additional labour.

Payroll taxes
If the rate of personal taxation increases then labour may seek a higher wage rate and this makes labour less competitive. Similarly if the rate of PRSI on labour increases this is an additional cost for the firm, which may reduce their demand for labour.

 Availability of technology
A firm’s demand for labour will be affected by the availability of new technologies, particularly if it helps to reduce costs.

Trade union involvement
If a worker is a member of trade union then the firm may not employ this worker. This applies particularly to some firms in Ireland, which operate without the involvement of trade unions.

**Marking Scheme: 20 marks 4 points x 5 marks each graded**

(c) The diagram below represents the supply curve of labour to a particular firm.

![Wage rate Supply Curve Supply of labour](image)

Explain the effect which each of the following developments may have on this supply curve. Illustrate each answer by means of a diagram.

(i) The workers shift their preference towards increased leisure time
(ii) The workers’ trade union negotiates a minimum wage. (25 marks)
(i) Workers shift their preference towards increased leisure time: 13 marks graded

**Diagram: 6 marks**

Explaination: 7 marks graded
Workers will reduce the number of hours worked. Hence the supply curve of labour may:
(a) shift to the left, work less hours at all wage rates
(b) after a certain higher wage rate work less hours, the backward bending supply curve.

(ii) The workers’ trade union negotiates a minimum wage: 12 marks graded

**Diagram: 6 marks**

Explanation: 6 marks graded
If a minimum wage level is set at $W_e$ then no labour will be supplied below this wage rate so portion $AB$ of the supply curve of labour will no longer apply.
(a) Discuss the ways in which money can contribute to the smooth working of an economy. (20 marks)

1. **Medium of exchange**
   Money allows us to buy and sell goods & services independently of each other.

2. **Measure of value**
   The use of money allows us to put a value on an item and relate the value of one item to the value of others.

3. **Store of wealth**
   The use of money allows us to save some of our wealth for the future.

4. **Standard of deferred payment**
   The use of money allows us to buy goods on credit now and to pay later.

5. **Division of labour**
   The use of money allows each person to specialise in one task and with the money received acquire those goods and services, which are needed to survive.

6. **Time saving**
   The use of money saves time in not having to negotiate the relative worth of different items, unlike barter.

7. **Increased wealth**
   Money allows for the specialisation of labour / firms, thus increasing society’s wealth which allows for the provision of more services and for improvements in the state’s infrastructure.
8. Confidence
The use of money gives citizens confidence that the economy will operate effectively and hence consumers and firms will contribute to society and be rewarded.

9. Demand management of the economy
If aggregate demand needs to be boosted then the supply of money could be relaxed while a reduction in aggregate demand may require a tightening of the money supply.

Marking Scheme: 4 points x 5 marks each graded.

(b) Explain the likely economic effects if: -
   (i) the supply of money grows at a faster rate than a country’s production of goods and services;
   (ii) the supply of money grows at a slower rate than a country’s production of goods and services; (20 marks)

(i) the supply of money grows at a faster rate than a country's production of goods and services. 10 marks graded
1. Inflation - prices may rise because of insufficient supply/excess demand.
2. Imports - demand may be met by increased imports.
3. Savings - the insufficient supply of goods may force people to save.
4. Value of currency in a non-euro zone country may fall because of excess supply.
5. Rate of interest – under Keynes’ Liquidity Preference if the supply of money grows then interest rates will fall.

2 points x 5 marks each graded

(ii) the supply of money grows at a slower rate than a country’s production of goods and services. 10 marks graded
1. Deflation / Moderation in price levels - prices may fall because of excess supply.
2. Falling demand ⇒ declining economic growth ⇒ producers may rationalize, leading to rising unemployment.

2 points x 5 marks each graded
(c) (i) Explain what is meant by the term **price inflation.** (35 marks)
(ii) Name the **main index** used to measure price inflation in the Irish economy.
(iii) Outline the economic consequences of a rise in the rate of price inflation in Ireland.

(i) **Price inflation:**
- This is the *continuous rise* in the *general price level.*
  or
- This is the *fall* in the *value / purchasing power of money*

(ii) **Main index to measure inflation:**
- Consumer Price Index

(iii) **Outline the economic consequences of a rise in the rate of price inflation in Ireland.**

1. **Lower standard of living**
   Because of the higher costs, people have reduced purchasing power, which causes a reduction in their standard of living.

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

3. **Loss of competitiveness**
   If inflation is higher in Ireland than with the rest of our trading partners it will result in a loss of competitiveness in 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 thus reduce the numbers employed.

5. **Government Finances**
   With higher prices the government may collect increased indirect tax revenues.

6. **Savings discouraged**
   If the inflation rate is greater than the (nominal) rates of interest offered on savings, the real rate of interest available to savers falls thus discouraging savings.
7. **Borrowings encouraged.**
If the inflation rate increases the real rate of interest charged on borrowings falls and therefore 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 fall in their living standards, those on fixed incomes must wait for the government to decide to adjust their payments. This may widen the gap between these sectors.

9. **Pressure on social partnership/ industrial relations unrest**
The lowering of living standards may threaten the existence of social agreements and may prevent future agreements.

10. **Balance of Payments difficulties.**
With falling exports and increasing imports our Balance of Payments position deteriorates.

11. **Pressure on the European Central Bank (ECB)**
Rising inflation may force the ECB to take corrective action to help curb it.

12. **Uncertainty**
Rising inflation rates in Ireland creates uncertainty for investors/entrepreneurs and may influence investment decisions.

*5 points x 5 marks each graded*
Question 6  GNP and Declining Economic Growth

(a) Explain the following terms and show the relationship which exists between both:

(i)  Gross Domestic Product at Factor Cost
(ii) Gross National Product at Market prices.  
(20 marks)

Gross Domestic Product at Factor Cost:  
7 marks graded

It is the total value of input / expenditure / within the country as a result of engaging in current economic activity in one year, valued at payments to factors of production.

Or

the output produced by the factors of production in the domestic economy irrespective or whether the factors are owned by Irish nationals or foreigners, valued at payments to factors of production.

Gross National Product at Market Prices:  
7 marks graded

It is the value of total output / expenditure valued at today's market prices, produced by Irish owned factors of production, before any adjustments are made for taxation, subsidies or depreciation.

Or

It is the value of the total goods and services produced in an economy in a year valued at current/today’s market prices, produced by Irish owned factors of production.

Relationship:  
6 marks graded

G.D.P. at Factor Cost  
+/- Net Factor Income from Rest of the World  
= G.N. P. at Factor Cost  
+  Indirect taxes  
-  Subsidies  
= G.N.P. at Market Prices
(b) Outline the effects which each of the following could have on the level of GNP at Market Prices.

(i) a **RISE** in the general level of VAT;

(ii) a **REDUCTION** in subsidies to first-time house buyers.

Explain your answer in each case. (20 marks)

Short-term:

<table>
<thead>
<tr>
<th>Effect on GNP at Market Prices</th>
<th><strong>RISE</strong> in general level of VAT</th>
<th><strong>REDUCTION</strong> in subsidies to first-time house buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Will increase</td>
<td>Will increase</td>
</tr>
</tbody>
</table>

The increase in VAT will increase the prices for goods & services which consumers must pay in the market place.

The decrease in first-time house buyers subsidies will increase GNP at market prices as house prices will rise in the market place.

10 marks graded

or

Long-term:

<table>
<thead>
<tr>
<th>Effect on GNP at Market Prices</th>
<th><strong>RISE</strong> in general level of VAT</th>
<th><strong>REDUCTION</strong> in subsidies to first-time house buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Will decrease</td>
<td>Will decrease</td>
</tr>
</tbody>
</table>

The increase in VAT will increase the prices of goods & services which consumers must pay in the market place. Thus, demand falls and output falls. Real output falls by more than the increase in the price level.

The decrease in first-time house buyers’ subsidies will decrease GNP at market prices as house prices will rise in the market place. Producers lose this subsidy and so the output of houses falls. Decline in real activity exceeds the elimination of the subsidy element.

10 marks graded

10 marks graded
(c) Discuss the positive **and** negative economic consequences which a fall in the level of economic growth (GNP) may have on the Irish economy. (35 marks)

<table>
<thead>
<tr>
<th>Positive consequences</th>
<th>Negative consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Moderation in price increases.</strong>&lt;br&gt;With the fall in the level of economic activity the level of demand induced inflation will fall.</td>
<td><strong>1. Unemployment</strong>&lt;br&gt;A reduction in GNP reduces demand and this may lead to a reduction in employment.</td>
</tr>
<tr>
<td><strong>2. Reduction in labour shortages.</strong>&lt;br&gt;The fall in demand for goods &amp; services may decrease the demand for labour in certain sectors, easing labour shortages.</td>
<td><strong>2. Strain on government finances.</strong>&lt;br&gt;The government may suffer a decline in their tax revenues and an increase in current spending on social welfare will put a strain on government finances.</td>
</tr>
<tr>
<td><strong>3. Moderation in wage demands.</strong>&lt;br&gt;Expectations by workers may decline with respect to pay increases.</td>
<td><strong>3. Reduced investment opportunities.</strong>&lt;br&gt;With lower GNP and contracting demand entrepreneurs may have fewer opportunities for profitable investments.</td>
</tr>
<tr>
<td><strong>4. Revised expectations by citizens.</strong>&lt;br&gt;During an economic boom our expectations grow and may conflict. With falling GNP we may revise our expectations downwards i.e. expect less investment in infrastructure.</td>
<td><strong>4. Reduction in standard of living.</strong>&lt;br&gt;The fall in GNP lowers average incomes and this will reduce the average standard of living.</td>
</tr>
<tr>
<td><strong>5. Reduced demand for imports.</strong>&lt;br&gt;A reduction in GNP lowers incomes and spending power and demand for imports may fall thus improving our Balance of Payment position.</td>
<td><strong>5. Provision of state services / infrastructure</strong>&lt;br&gt;The dis-improvement in state finances will make it more difficult to fund improvements in current state services i.e. the health and education sectors and may make it more difficult to fund major infrastructural developments e.g. our road infrastructure.</td>
</tr>
<tr>
<td><strong>6. Restore balance in the housing market</strong>&lt;br&gt;The fall in GNP will reduce spending power and help reduce inflation in this market, easing it towards equilibrium</td>
<td><strong>6. Private sector workers targeted</strong>&lt;br&gt;With falling GNP businesses may rationalise and hence private sector employees may be affected more adversely, than public sector employees.</td>
</tr>
<tr>
<td><strong>7. Reduced immigration</strong>&lt;br&gt;Reduced GNP will lower demand and reduce opportunities for employment, leading to a possible fall in immigration</td>
<td></td>
</tr>
<tr>
<td><strong>8. Less pressure on state infrastructure</strong>&lt;br&gt;Lower GNP results in less demand for scarce resources/ less damage to the environment/ lower incomes will reduce demand for commodities i.e. cars</td>
<td></td>
</tr>
</tbody>
</table>

*5 points at 7 marks each graded.*

**Minimum: of 2 positive/negative consequences required.**
(a) Discuss the economic effects, which the recent rise in Ireland’s population may have on the Irish economy.  

(25 marks)

1. Increased demand for goods & services.  
With rising population the demand for goods & services within the country increases.

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 social infrastructure.  
Greater pressure is exerted on the infrastructure of the country leading to bottlenecks e.g. increased traffic jams.

4. Larger domestic market.  
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.

5. Better utilisation of state services.  
If the population lives in underpopulated areas of the country then services available may be more fully utilized i.e. transport services, schools etc.

6. Decreased Dependency ratio  
The 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.

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

25 marks: 5 points x 5 marks each. graded
(b) Outline the effects which a rise in the level of unemployment in Ireland may have on:

(i) Government current finances.
(ii) The Balance of Payments (Current Account).
(iii) Price Inflation.  

<table>
<thead>
<tr>
<th>Effects of a RISE in UNEMPLOYMENT</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government Current Finances</strong></td>
<td>7 marks graded</td>
</tr>
<tr>
<td>1. Reduction in taxation revenues.</td>
<td></td>
</tr>
<tr>
<td>2. Increase in social welfare payments.</td>
<td></td>
</tr>
<tr>
<td><strong>Balance of Payments (Current Account)</strong></td>
<td>7 marks graded</td>
</tr>
<tr>
<td>1. Lower incomes leading to a reduction in imports. or</td>
<td></td>
</tr>
<tr>
<td>2. Rising unemployment may mean closures of business – some of which may be export orientated, hence lower exports.</td>
<td></td>
</tr>
<tr>
<td><strong>Price Inflation</strong></td>
<td>6 marks graded</td>
</tr>
<tr>
<td>1. Moderation in the rate of price inflation due to the reduction in spending power and a fall in demand pull inflation. Or</td>
<td></td>
</tr>
<tr>
<td>2. In the long term the increase in unemployment may lead to the need to increase taxation / rise in charges for certain services, resulting in a rise in the CPI.</td>
<td></td>
</tr>
</tbody>
</table>
(c) Immigration replaced high levels of emigration during the ‘Celtic Tiger’ period.

(i) Discuss THREE reasons why the trend has changed from emigration to immigration in Ireland.

1. Emergence of the ‘Celtic Tiger’ / Increased awareness of opportunities.
   - The boom in the Irish economy with employment opportunities attracted immigrant workers.
   - Global communications have made people more aware of the employment opportunities available in Ireland.
   - Multi national corporations may bring their own personnel to do specific work.

2. Member of EU and ease of access.
   With the relative prosperity of citizens in the EU many non-EU nationals seek an improvement in their living standards and as Ireland is a member of the EU it has become an attractive destination for these immigrants.

3. Ireland’s social welfare system.
   Ireland offers a ‘caring’ welfare system, in comparison to some countries and this eases the difficulties of re-locating to Ireland, making it an attractive destination.

4. Stricter immigration controls in other countries
   The economic downturn in some countries such as Germany coupled with tighter immigration controls in certain countries such as Australia and the USA has led to Ireland attracting more immigrants.

5. Recruitment in the past by FAS to fill labour shortages.
   During the boom Ireland experienced significant labour shortages in certain sectors and state / private agencies sought immigrants to fill these vacancies.

   In recent years personal taxation levels have fallen attracting home people who have emigrated in the past due to high tax rates.

   Ireland offers its citizens a better quality of life and people who had emigrated have returned home to rear their children in what is considered a safe environment.

8. Humanitarian Factors.
   People forced out of their own countries due to conflicts have been welcomed in the past by the Irish state i.e. those displaced in the Kosovo conflict.

14 marks: 3 points at 5 + 5 + 4 marks graded.
(ii) Discuss the economic consequences (positive and negative) for a country experiencing increased immigration.

<table>
<thead>
<tr>
<th>Positive consequences</th>
<th>Negative consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased demand for goods &amp; services. The level of demand for goods &amp; services will increase leading to greater opportunities for businesses.</td>
<td>1. Pressure on provision of state services. With an increasing number of immigrants there will be pressure on the government to provide/improve services available to immigrants.</td>
</tr>
<tr>
<td>2. Improved dependency ratio. If immigrants are mainly in the working age group then dependency ratio decreases.</td>
<td>2. Drain on state finances. The need to provide immigrants with benefits will put further pressure on government finances.</td>
</tr>
<tr>
<td>3. Reduction in labour shortages. Immigrants may fill those vacancies, which exist in the labour market and help ease the pressure on wage rates.</td>
<td>3. Exploitation of Immigrants. If immigrants are not adequately protected then they may be forced to work/live in poor conditions and accept low levels of pay</td>
</tr>
<tr>
<td>4. Greater utilisation of services. If immigrants locate in low density populated areas, then services will be more fully utilised</td>
<td>4. Increased dependency ratio If immigrants are mainly in the non-working age group then the dependency ratio increases.</td>
</tr>
<tr>
<td>5. New skills / traditions within society. The economy may benefit from new skills/traditions helping society become more tolerant, efficient and competitive.</td>
<td>5. Resentment / Racism. An increase in immigration may lead to resentment/racism within a country requiring greater policing / legislation.</td>
</tr>
</tbody>
</table>

16 marks: 4 points x 4 marks each graded
2 positive and 2 negative
Question 8  Trade and Adam Smith

(a) Explain how specialisation and the division of labour promotes globalisation / international trade. (20 marks)

1. Greater efficiency in the allocation of scarce resources.
   When countries specialise in producing goods in which they have a comparative advantage, they maximise their combined output and allocate their resources more efficiently.

2. Greater inter-dependence.
   A country which specializes is no longer self-sufficient and hence must trade for the remainder of its requirements.

3. Increased wealth, raising aggregate demand.
   When specialisation occurs individual countries gain thus increasing wealth and allowing it greater opportunities for engaging in trade / consumers will demand increased choice / variety of commodities.

4. Lower costs and prices.
   Specialisation improves efficiency resulting in lower costs and prices.
   With lower prices for commodities consumers will increase their demand and this leads to more trade.

5. Division of labour.
   When labour specialises skills may improve. Labour therefore becomes more mobile thus allowing for greater trade in labour.

6. Economies of scale.
   Greater economies of scale may be available when producing a product for a world market that would not be available when producing for a more limited domestic market.

20 marks: 2 points x 10 marks each graded
(b) The World Trade Organisation (WTO) aims to reduce trade barriers between countries. (35 marks)

(i) Outline THREE possible economic advantages of free trade. 15 marks graded

1. Improved standard of living.
2. Greater choice of commodities.
3. More competitive prices.
4. Greater efficiency in the use of scarce world resources.
5. Employment opportunities.
6. Allows specialisation to take place.
7. Allows for the sale of surplus/excess domestic output.

1. Improved standard of living.
Trade between countries increases the wealth of nations and this allows the purchase of a greater quantity of goods and services.

2. Greater choice of commodities.
Trade between countries allows consumers benefit from a greater variety of goods and services than would be available without trade.

3. More competitive prices of goods and services.
Trade results in greater competition, which should lead to more competitive prices for consumers.

4. Use of scarce world resources.
By specialising in production countries maximise their combined outputs and thus resources are allocated more efficiently.

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

6. Allows specialisation to take place / Companies benefit from economies of large scale production
Free trade ensures that specialisation will take place and countries will thus benefit from the gains resulting from specialisation.

7. Allows for the sale of surplus/excess domestic output.
If a company is competitive then it has the opportunity to sell that output which it doesn’t/can’t sell domestically on the international market.

15 marks: 3 points x 5 marks each graded. 29
(ii) Explain THREE economic reasons why countries may impose barriers to restrict trade.
1. Protect indigenous firms / infant industries.
2. Protect domestic employment.
3. Prevent dumping.
4. Prevent imports from ‘cheap labour’ economies.
5. Protect a declining industry for a period of time.
6. Protect industries/firms susceptible to foreign competition.
7. Safeguard national security.
8. Safeguard the production of strategic goods.

1. Protect indigenous firms / infant industries.
   Infant industries may have a difficulty competing with established industries in other countries. By protecting a newly established company it may mature into a strong company worldwide.

2. Protect domestic employment.
   Foreign competition may result in job losses. By limiting imports jobs may be protected.

3. Prevent ‘dumping’.
   Barriers will stop other firms from ‘dumping’ and so stop their ability to undermine domestic firms, which may result in their closure.

4. Prevent imports from ‘cheap labour’ economies.
   Companies cannot compete with those countries who gain their comparative advantage by paying their workers low wages. Competition from these countries may be considered unfair.

5. Protect a declining industry for a period of time.
   In the past some industries have been protected so that their decline can be gradual thus allowing workers retrain and allowing time for sourcing replacement industries.
6. Protect industries/firms susceptible to foreign competition. Within the EU, agriculture and fishing are seen as important industries. For this reason the EU seeks to protect these industries from external competition.

7. Safeguard National Security. Recently Ireland imposed strict regulations governing the importation of agricultural commodities so as to protect the country from foot and mouth disease.

8. Safeguard the production of strategic goods. Countries may wish to ensure that the production of certain commodities, which it deems essential to the operation of the economy, are safeguarded from competition to provide continuity of supply.

12 marks: 3 points x 4 marks each graded

(iii) State and explain TWO methods of restricting free trade.

1. Tariffs.
2. Quotas
3. Embargoes.
5. Subsidies to exporters.
6. Exchange Control regulations (non euro-zone).

1. Tariffs.
This is a tax on imported goods. It increases the price of imported goods thus making them less competitive.

2. Quotas
This is a physical limit on the quantity of imports into a country.

3. Embargoes.
This is a total ban on the importation of a commodity into a country.
When one country refuses to admit the produce of another country unless they are accompanied by very technical documentation or they meet strict conditions / satisfy very definite specifications.

5. Export subsidies.
Government payments made to domestic firms to encourage exports.

6. Exchange Control regulations (non euro-zone).
A country limits the amount of foreign currencies available to domestic importers so as to limit their purchasing power / ability to buy imports.

8 marks: 2 points x 4 marks each graded.

(c) Adam Smith, author of ‘The Wealth of Nations’ (1776) explained the reasons for and benefits of free trade. Outline FOUR other areas in which he made contributions to economic thought.

(20 marks)

(i) The pursuit of self-interest
‘What best benefited the individual, best benefited the society’.

(ii) Division of Labour
Increased productivity leading to increased wealth in a country. He illustrated his theory with the example of the manufacture of pins.

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

(iv) 'Invisible hand of competition'
He advocated the operation of a self regulating market, thus ensuring that economic progress was achieved.
(v) **Perfect Competition**
Adam Smith favoured perfectly competitive markets. This allowed free entry into the market, profits sufficient to reward entrepreneurs, inefficiency penalized and prices based on the cost of production. Monopolies would not persist.

(vi) **Laissez-faire**
He believed that there was no justification for government intervention in the economy, except for national security such as defence / justice.

(vii) **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.

(viii) **Paradox of Value**
He distinguished between ‘value in use’ and ‘value in exchange’. Some items have a vast utility (air, water) but are not exchanged, while others (diamonds) possess little utility but can command a great value in exchange.

(ix) **Protection of property rights**
By protecting personal property rights an individual could accumulate wealth. The individual benefited and thus so did society.

*20 marks: 4 x 5 marks each graded*