Higher Level Economics

MARKING SCHEME

&

NOTES

(for use with the Marking Scheme)

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- There is no suggestion that the enclosed notes are exhaustive or definitively complete.
- Further 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. Explain the concept Opportunity Cost. Why is this concept central to the study of Economics?

**Opportunity Cost is the cost of foregone alternatives.**

This concept is central to the study of economics because:

**Economics studies the allocation of scarce resources, which have alternative uses.**
**The allocation of these resources involves making a choice.**

16 marks graded.

2. Outline THREE reasons for the survival of small firms in the Irish economy, even though they do not have the benefits of economies of scale.

1. **Small size of market**
The restricted size of the market may not facilitate the operation of large scale business e.g. in a rural area a small shop may be viable while a large supermarket may not.

2. **Personal Services**
Consumers may desire personal attention in the provision of goods or services and a small firm may be the only type of business which can provide this e.g. a plumber providing repair services to households.

3. **Consumer Loyalty**
A small firm may have built up a reputation over the years in the provision of goods and services to its customers and consumers may respond by being loyal to that firm, making it difficult for other firms to gain entry.

4. **Viable Community**
Citizens in smaller communities may support local business so that the continuity of supply is ensured. e.g. in many areas throughout Ireland communities wish to maintain the existence of ‘community’ hospitals. Enterprise Boards encourage individuals to establish small businesses.

5. **Traditional / Niche markets**
- The type of product/service being supplied might make it more suitable for a small firm.
  - Examples include: wedding planners; handmade/craft products; perishable products etc.
- A small firm may find that it easier to locate close to the market where it might be difficult for a larger firm to do so e.g. roadside sellers of local produce can be flexible in choosing their location.

6. **Nature of the commodity**
Heavy goods which are costly to transport may be manufactured locally on a small scale to supply local markets e.g. the manufacture of concrete blocks in areas which service local markets.

7. **Membership of voluntary groups/Alliances between firms at different stages of production**
Some firms producing on a small scale may offset the disadvantage they have in competition with large producers by adopting a joint marketing strategy with other small suppliers e.g. hotel groups, individually owned grocery shops trading under a shared name.

16 marks graded.

3. Explain what is meant by Consumer Surplus.

**The benefit to consumers due to the difference between what consumers actually pay to consume a good and what they would have been willing to pay, rather than go without the good.**

16 marks graded.
4. A consumer in equilibrium buys 10 cups of coffee at €2 each and 10 phone cards at €6 each. The marginal utility of the cups of coffee is 5 utils. What is the marginal utility of phone cards? Show your workings.

\[
\frac{\text{Marginal Utility of coffee}}{\text{Price of Coffee}} = \frac{\text{Marginal Utility of Phone Cards}}{\text{Price of Phone Cards}}
\]

\[
\frac{5}{€2} = \frac{\text{MU}_{PC}}{€6} \quad \text{so} \quad \text{MU}_{PC} = \frac{15 \text{ utils}}{}
\]

16 marks graded.

5. Explain what is meant by the term Public Sector Borrowing Requirement.

Financing the Exchequer Borrowing Requirement and Semi-State bodies and Local Authority borrowing.

16 marks graded.

6. For a composite (weighted) price index covering the three types of expenditure given in the following table, calculate the price index for the current year. The base year is 100.

<table>
<thead>
<tr>
<th>Category</th>
<th>% income spent on item(s)</th>
<th>Prices of item(s) Base Year</th>
<th>Prices of item(s) Current Year</th>
<th>Calculation of Simple Price Index</th>
<th>Weight</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>30%</td>
<td>€10.00</td>
<td>€11.50</td>
<td>11.50 x 100 = 115.00</td>
<td>x 30%</td>
<td>34.5</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>20%</td>
<td>€40.00</td>
<td>€36.00</td>
<td>36.00 x 100 = 90.00</td>
<td>x 20%</td>
<td>18.0</td>
</tr>
<tr>
<td>Other Items</td>
<td>50%</td>
<td>€20.00</td>
<td>€22.00</td>
<td>22.00 x 100 = 110.00</td>
<td>x 50%</td>
<td>55.0</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td></td>
<td>Price Index for the Current Year</td>
<td></td>
<td></td>
<td>107.5</td>
</tr>
</tbody>
</table>

17 marks graded.

7. “When a firm produces at a level of output at which marginal cost is greater than marginal revenue the firm is maximising profit (or minimising losses)”. True / False

(Place a circle around your choice and write a one-sentence explanation of your answer)

False. The extra cost of producing further units of output is greater than the extra revenue generated therefore the firm could increase its profits by producing less output. The increased output adds more to cost than to revenues earned. Profits are maximised where MC=MR.

17 marks graded.
8. Outline THREE key ideas, which John Maynard Keynes contributed to economic thought.

(a) National income could reach equilibrium without reaching full employment.
(b) The level of national output is demand determined.
(c) He favoured government intervention in the economy.
   The job of the government is to manage the economy.
   The government can use fiscal policy to create full employment.
   (The size of national income depends on expenditure and hence employment depends on expenditure).
(d) He stated that investment by entrepreneurs depended more on businessmen’s expectations than on the rate of interest.
(e) Investment could be less than savings and cause a leakage in spending which decreases national income and employment.
(f) He created new economic tools to explain his theories- the multiplier, MPC, MPM, etc.
(g) The multiplier: any initial increase in spending will cause a greater increase in GNP.
(h) The liquidity preference theory: people desired to hold their wealth in money form for three reasons: transactionary, speculative and precautionary.
(i) He favoured a managed system of foreign exchange rates rather than the gold standard.

9. Given that Gross National Product at Current Market Prices is €180 million; Price Subsidies €4 million; Depreciation €15 million; Indirect Taxes €25 million; Complete the following calculations. Show your workings.
   (i) Gross National Product at Factor Cost.

   (i) Gross National Product at Factor Cost

   $\text{GNP @ Market Prices} + \text{Price Subsidies} - \text{Indirect Taxes} = \text{GNP @ Factor Cost}$
   €180 million + €4 million - €25 million = €159 million

   (ii) Net National Product at Factor Cost/National Income

   $\text{GNP @ Factor Cost} - \text{Depreciation} = \text{NNP @ FC}$
   €159 million* - €15 million = €144 million

   [17 marks graded]
Question 1 – Demand, Markets and Government Intervention in markets

(a) State and explain FIVE factors that affect a consumer’s demand schedule (25 marks)

The factors which influence a consumer's demand schedule: \(DA = f(P, P_{OG}, Y, T, E, G, U)\)

(i) Price of the good itself.
Generally as the price of a good falls consumers will buy more of that good – consumers are getting better value for their money.

(ii) 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, as consumers may be tempted to use alternative modes of transport. If the price of a substitute good rises then demand for this good falls, as it has become relatively cheaper.

(iii) Income of the consumer.
For normal goods as disposable income rises the demand for them increases and vice versa e.g. smaller quantities of goods are bought when a person becomes unemployed.

(iv) Consumer tastes or preferences.
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.

(v) Expectations concerning future prices.
If a consumer expects that future prices are likely to be greater than they are at present, then there may be an increase in the demand for the good at each price.

(vi) 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.

(vii) Unplanned factors.
If there was a sudden heatwave this may result in an increase in the demand for suncream / icecream.

5 points at 5 marks graded.

(b) (i) Show, by means of a labelled diagram, the market demand and supply for a product. Indicate the equilibrium price and quantity in this market.

![Diagram: P, Q, D/C and S/C: Equilibrium P_E and Q_E]

6 marks graded.
(b) (ii) Explain, with the aid of a separate diagram in each case, the effects which each of the following may have on the above equilibrium position.
- A successful advertising campaign is favour of the product is introduced;
- A tariff on imports of the product is removed.

**A successful advertising campaign is favour of the product is introduced – 12 marks graded.**

![Graph of supply and demand](image1)

**Effect:** The D/C will shift to the right.  
**Why?** Consumers are enticed to buy more due to the successful advertising campaign  
**Equilibrium:** both price and quantity increase.

**A tariff on imports of the product is removed – 12 marks graded.**

![Graph of supply and demand](image2)

**Effect:** The S/C will shift to the right.  
**Why?** The removal of the tariff will result in an increase in the quantity of imports into the market resulting in an increase in supply.  
**Equilibrium:** Price falls and quantity increases.
(c) Assume that the average spending on energy by a low income family is €40 weekly. The price of energy rises by 20% so that the same consumption by a low income family would now cost €48 weekly.

The government is considering introducing one of the following policy measures to assist low-income families:
- giving low income families an increased allowance of €8 weekly (income supplement);
- subsidising the producers of energy so that energy can continue to be sold at the initial price (price subsidy)

Which policy measure would you advise the government to take? Explain the economic reasons for your answer. *(20 marks)*

**Giving low income families an increased allowance of €8 weekly (income supplement).**

1. **Cost efficient.**
   As the income supplement specifically targets low-income families it is cost efficient and cheaper for the government than the price subsidy.

2. **Purchasing power maintained / No change to standard of living.**
   Low-income families will now receive an additional €8 weekly income. The family now have a choice in deciding how to allocate this. It can maintain existing energy consumption or economise on the use of energy and use the €8 in some alternative way.

3. **Efficient use of state scarce revenues.**
   As government revenue is limited and there are many demands on it the specific targeting of low income families could lead to more efficient use of these scarce revenues.

4. **Efficient use of scarce resources by consumers.**
   As the price of energy rises, consumers seeing this may economise on energy use thus saving scarce resources.

**OR**

**Subsidising the producers of energy so that energy can continue to be sold at the initial price (price subsidy).**

1. **Protecting employment.**
   By using a price subsidy the demand for energy will remain unchanged and so employment is protected.

2. **Prevent an increase in inflation / maintain competitiveness.**
   The government may use the price subsidy so that energy prices remain unchanged hence maintaining price stability and ensuring that our competitiveness is not affected, subject to EU rules.

3. **Pressure on employees for greater cost efficiencies / maintain partnership agreements.**
   The government may use this price subsidy as leverage for achieving cost reductions within the industry. This could involve: encouraging employees to face cutbacks / rationalisation; encouraging employees and trade unions to continue with Partnership Agreements, in return for maintaining price stability.

2 points at 10 marks graded.
Question 2: IMPERFECT COMPETITION

(a) State and explain the assumptions underlying the theory of imperfect competition. (20 marks)

1. There are many buyers in the industry.
   - Each buyer acts independently.
   - No individual buyer, by his/her own actions, can influence the market price of the goods.

2. There are a large number of sellers within the industry.
   - Each seller acts independently.
   - An individual seller can influence the quantity sold by the price it charges for its output.

3. Product Differentiation exists.
   - The goods, which are supplied by the producers, are not identical goods but are close substitutes.
   - Firms try to establish in the minds of the public that the goods are not perfect substitutes by selling their goods under brand name.

4. There is freedom of entry into and exit from the industry.
   - Firms already in the industry cannot prevent new firms from entering the industry.
   - No barriers to entry exist within the industry.
   - It's possible for firms to enter/leave the industry as they wish.

5. Reasonable knowledge as to profits made by other firms.
   - In the industry everyone concerned has reasonable knowledge as to profits made by other firms.
   - Consumers may not be fully aware of the prices being charged for different products.

6. Each firm tries to maximise profits.
   - The sole aim of each firm is produce that quantity which will maximise its profits in the short run.
   - Hence the aim of a firm is to minimise costs.
   - It will produce where MC = MR.

   **5 points at 4 marks graded.**

(b) (i) Explain with the aid of a clearly labelled diagram the long run equilibrium position of a firm in imperfect competition.

(ii) State and explain ONE feature of this firm in long run equilibrium which would be common to a firm in long run equilibrium under perfect competition.

(iii) State and explain ONE feature of this firm in long run equilibrium which would be common to a firm in long run equilibrium under monopoly. (40 marks)

(b) (i) The long run equilibrium position of a firm in imperfect competition. **Diagram: 16 marks**

![Diagram of a firm's long run equilibrium position in imperfect competition.](image)
Explanation of long run equilibrium:

1. Equilibrium occurs at point A where MC = MR (and MC is rising and cuts MR from below).
2. The level of output produced is $Q_1$ and the price the firm sells this output at is $P_1$.
3. The average cost of production is shown at point B.
4. This firm is earning normal profits because AR = AC.
5. The firm is not producing at the lowest point of AC (point C). This indicates that the firm is wasting scarce resources.

(b) (ii) and (iii)

<table>
<thead>
<tr>
<th></th>
<th>Perfect Competition</th>
<th>Monopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Both earn Normal Profit</td>
<td>Both wasteful of resources 1. Both wasteful of resources</td>
<td></td>
</tr>
<tr>
<td>Because AR = AC.</td>
<td>Neither produces at the lowest point of average cost:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Downward sloping D/C 2. Downward sloping D/C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both must lower P to increase $Q_D$ 3. Price is greater than MC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicates than more of the good could be produced.</td>
<td></td>
</tr>
</tbody>
</table>

Explanation of long run equilibrium and Part (b) (ii) and (iii): 24 marks graded.

(c) Consider the retail market for petrol. Do you believe that this market operates under conditions of imperfect competition? State reasons for your answers. (15 marks)

The retail market for petrol operates under conditions of imperfect competition because:

1. There are many sellers of petrol within the market e.g. Shell, Statoil, Maxol.
2. The products sold are close substitutes. There is competitive advertising and heavy ‘product loyalty’ promotion. Various gimmicks are used to attract customers. Sellers also use ‘brand names’ extensively to maintain consumer loyalty.
3. Each seller can influence the demand for petrol by altering the price as consumers are becoming far more sensitive to the price differences for petrol.

15 marks graded.

Note: Arguments for oligopoly market from a national point of view were also accepted.
Question 3 - Factors of Production

(a) Marginal Revenue Product (MRP) equals Marginal Physical Product (MPP) multiplied by Marginal Revenue (MR).
   (i) Explain the underlined terms. (ii) Outline the factors which influence MPP and MRP.  

<table>
<thead>
<tr>
<th>Definition</th>
<th>Marginal Physical Product (MPP)</th>
<th>Marginal Revenue Product (MRP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The extra output produced when an additional unit of factor of production is employed.</td>
<td>The extra revenue earned when an additional unit of factor of production is employed.</td>
</tr>
</tbody>
</table>

Factors Influencing MPP and MRP

1. Quality / Specialised nature of the factors.  
   If the quality of the factors used improves then they become more efficient and additional output will be produced.

2. Training/Education provided for the factors.  
   If the factors are trained they become more skilled resulting in increased efficiency and more output.

3. Expertise of the entrepreneur.  
   If the entrepreneur is expert in organising the production unit then each factor will be more productive and work to their maximum efficiency.

   As each additional unit of a factor is used a point will be reached where the additional output produced will decline.

1. The productivity of the factor.  
   The more productive each additional factor employed is then the more MRP that factor will earn.

2. The MR / selling price of the output.  
   If the selling price obtained on the market is rising or constant (and not falling) then the higher will be that factor’s MRP.

3. The Law of Demand.  
   On the market, the law of demand dictates that in order for more to be sold then price must be reduced – this affects the MR obtained by the firm.

(b) (i) Define LAND as a factor of production. (ii) Outline TWO economic characteristics of land.

(i) Land: Anything supplied by nature which helps in the production of output.  

(ii) Economic Characteristics of land:  

<table>
<thead>
<tr>
<th>Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land is fixed in supply</td>
<td>Nature has provided only a certain amount of land and this cannot be increased by man.</td>
</tr>
<tr>
<td>The earnings of land are economic rent / it has no cost of production.</td>
<td>This is because land is a gift of nature.</td>
</tr>
<tr>
<td>It is a non-specific factor of production</td>
<td>This means that it is not confined to one specific use but its uses can change.</td>
</tr>
<tr>
<td>The price of land does not affect the quantity available</td>
<td>This is unusual for factors. In the case of labour if wages fall the supply of labour may increase or decrease.</td>
</tr>
</tbody>
</table>
(iii) Explain the concept of Economic Rent and illustrate with a relevant example: [12 marks graded]

Economic Rent: Any earnings of a factor above its supply price/transfer earnings.

Example: Any appropriate / relevant example.

(c) The price of residential property has increased in Ireland in recent years.
Discuss **FOUR** reasons for this development.  

(20 marks)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Inflation.</td>
<td>▪ Inflation in Ireland has been rising – this leads to a general increase in prices, including house prices.</td>
</tr>
<tr>
<td>2. Demand:</td>
<td>▪ Interest rates continue at a low level and this has led to substantial increases in mortgage lending by financial institutions.</td>
</tr>
<tr>
<td></td>
<td>▪ Financial institutions have also eased lending restrictions in recent years.</td>
</tr>
<tr>
<td>3. Demand: Economic growth</td>
<td>▪ With economic growth and high employment more people are entering the property market thereby increasing demand.</td>
</tr>
<tr>
<td>4. Demand:</td>
<td>The following factors have led to an increase in demand:</td>
</tr>
<tr>
<td></td>
<td>▪ An increasing proportion of Ireland’s population is within the age- group capable of buying property.</td>
</tr>
<tr>
<td></td>
<td>▪ Returning emigrants and a rise in immigration.</td>
</tr>
<tr>
<td></td>
<td>▪ Land supply is limited in urban centres putting upward pressure on house prices in these areas.</td>
</tr>
<tr>
<td></td>
<td>▪ Socio-economic factors i.e. divorce / separations etc.</td>
</tr>
<tr>
<td>5. Demand: Speculation in houses.</td>
<td>▪ Increases in property prices fuels speculative demand with more people seeking investment opportunities in property / growth in demand for ‘second homes’.</td>
</tr>
<tr>
<td></td>
<td>▪ Availability of Section 23 incentives and tax designated zones has attracted investment in certain areas leading to demand for holiday homes.</td>
</tr>
<tr>
<td>6. Inadequate supply.</td>
<td>▪ Supply side issues include: lack of zoned land; hoarding of land; planning difficulties; labour shortages etc. All these factors limit supply thereby increasing prices.</td>
</tr>
<tr>
<td>7. Inflation in the</td>
<td>▪ Inflation within the construction sector is running at a higher rate than the general rate of inflation further fuelling property price increases.</td>
</tr>
<tr>
<td>Construction industry.</td>
<td></td>
</tr>
<tr>
<td>8. Government policies.</td>
<td>▪ The lack of affordable housing has forced prices for rental accommodation upwards and this has fuelled speculative demand for property.</td>
</tr>
</tbody>
</table>

**4 points at 5 marks graded.**
Question 4 – Government in the Economy

(a) In each of the following distinguish between the terms:
   (i) monetary policy and fiscal policy;
   (ii) progressive taxation and regressive taxation;
   (iii) tax avoidance and tax evasion. (30 marks)

<table>
<thead>
<tr>
<th>Monetary policy</th>
<th>Fiscal policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those actions by the ECB, which influence the money supply, interest rates and the availability of credit.</td>
<td>Any action taken by the government which influences the timing, magnitude and structure of current revenue &amp; expenditure.</td>
</tr>
<tr>
<td>Progressive taxation</td>
<td>Regressive taxation</td>
</tr>
<tr>
<td>One that takes proportionately more in tax as a person's income increases.</td>
<td>One that takes proportionately less in tax as a person's income increases.</td>
</tr>
<tr>
<td>Tax avoidance</td>
<td>Tax evasion</td>
</tr>
<tr>
<td>Arranging one's affairs within the law so as to minimise tax liabilities.</td>
<td>Reducing one's tax liabilities by making false returns or no returns.</td>
</tr>
</tbody>
</table>

6 terms at 5 marks graded.

(b) There has been an increase in government income in taxation in the past year.
   (i) Outline THREE reasons for this outcome.

1. Increase in income tax revenue
   - Increase in employment leading to an increase in income tax revenue.
   - Increasing number of taxpayers contributing at a higher marginal rate of tax.

2. Higher indirect tax revenue
   - Increase in economic growth, leading to higher spending and higher indirect taxes.

3. Increased efficiency in tax collection
   The Revenue commissioners are:
   - collecting substantial tax revenues from holders of non-resident accounts.
   - more efficient at collecting current taxes / at recouping taxes owed.
   - effective in encouraging citizens to be tax compliant.

4. Property taxes
   - An increase in house sales and house prices has resulted in a large increase in stamp duties, capital gains taxes and VAT.

5. Corporation profits tax revenue has risen
   - With businesses doing well the amount of corporation profits tax revenue has risen.

3 points at 5 marks graded.
(b) (ii) State ONE revenue opportunity and ONE expenditure opportunity for the government arising from this increased revenue.

<table>
<thead>
<tr>
<th>REVENUE opportunity</th>
<th>EXPENDITURE opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Income taxes</td>
<td>Increase spending on hospitals services.</td>
</tr>
<tr>
<td>Reduce VAT on goods and services</td>
<td>Increase spending on education.</td>
</tr>
<tr>
<td>Reduce Stamp Duties</td>
<td>Increase pay for public servants</td>
</tr>
<tr>
<td>Reduce excise duties on petrol</td>
<td>Improve the state’s infrastructure.</td>
</tr>
</tbody>
</table>

Which of these would you consider a priority?

Candidates may choose either a revenue or expenditure opportunity and justify their choice.

10 marks graded.

(c) Explain how an understanding by the Minister for Finance of the concept Price Elasticity of Demand would help in setting levels of indirect taxation. Use examples to illustrate your answer. (20 marks)

A knowledge of the concept of Price Elasticity of Demand could help the Minister for Finance in setting levels of indirect tax in two main ways:

1. **How to raise more revenue from indirect taxation levels.**
   An increase in indirect taxation on a commodity will only lead to increased tax revenue if the demand for the commodity is inelastic.

   **Example:** Price inelastic commodities [alcohol and cigarettes].
   If the demand for these commodities is price inelastic then by increasing the VAT rate on these commodities, the Government will earn additional revenue because the percentage decrease in demand is less than the percentage increase in selling price.

2. **How to reduce the consumption of ‘harmful’ commodities.**
   Increasing the rate of indirect taxation on certain (elastic) commodities may help the government to reduce the consumption of commodities which may have high social costs. If the Minister knows they are elastic commodities, then by increasing VAT rates, the demand for these goods will fall, thus helping to achieve this objective.

   **Example:** Price elastic commodities.
   While an increase in the rate of indirect tax may not bring in additional revenue (due to the drop in demand) the aim of reducing consumption of these commodities may be achieved.

20 marks: 2 reasons at 5 marks graded. 2 examples at 5 marks graded.
Question 5  Trade

(a) Explain the following terms:
   (i) Balance of Trade;
   (ii) Balance of Payments on Capital Account;
   (iii) Terms of Trade.  (25 marks)

**Balance of Trade – 8 marks graded**
- Is the difference between visible exports and visible Imports.

**Balance of Payments on Capital Account – 8 marks graded**
- This is a record of a country’s receipts and payments for capital items.
- This is a record of a country’s inflow and outflow of capital/items of a non-recurring nature.

**Terms of Trade – 9 marks graded**
- The ratio between the average price of exports and the average price of imports.
- The amount of imports that can be bought per unit of exports.
- Index of export prices  x  100
  Index of import prices

(b)

<table>
<thead>
<tr>
<th>Country</th>
<th>Output (production per worker per week)</th>
<th>MACHINES</th>
<th>CARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAIN</td>
<td></td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN</td>
<td></td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>Total Output</td>
<td></td>
<td>60</td>
<td>20</td>
</tr>
</tbody>
</table>

(i) Explain how benefits for both countries arise from international trade, in the above example.

*In world terms 1 Car = (60/20) 3 machines, or 1 machine = (20/60) ⅓ car.*

- With specialisation the output of machinery has decreased by 20 units or 33⅓%.
- If the world is to be better off with trade the output of cars must rise by a minimum of (20/3) 6.67 cars.
- The output of cars has risen by 10 (50%)
- Therefore since the ↑ in 50% is greater than the ↓ 33⅓% : the world is better off.

7 marks graded

(ii) Calculate the Total Output when specialisation takes place. Show your workings. 6 marks – graded.

<table>
<thead>
<tr>
<th>Country</th>
<th>Output (production per worker per week)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With Specialisation</td>
</tr>
<tr>
<td></td>
<td>MACHINES</td>
</tr>
<tr>
<td>SPAIN</td>
<td>20 x 2 = 40</td>
</tr>
<tr>
<td>JAPAN</td>
<td>0</td>
</tr>
<tr>
<td>Total Output</td>
<td>40</td>
</tr>
</tbody>
</table>
(iii) Calculate the terms of trade for both commodities - **12 marks graded.**

**SPAIN**

<table>
<thead>
<tr>
<th>1 car</th>
<th>is the equivalent of / equals</th>
<th>4 machines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 machine</td>
<td>is the equivalent of / equals</td>
<td>¼ of a car</td>
</tr>
</tbody>
</table>

**JAPAN**

<table>
<thead>
<tr>
<th>1 car</th>
<th>is the equivalent of / equals</th>
<th>2.67 machines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 machine</td>
<td>is the equivalent of / equals</td>
<td>0.375 of a car</td>
</tr>
</tbody>
</table>

So the possible terms of trade for

<table>
<thead>
<tr>
<th>CARS :</th>
<th>lie between 4 machines and 2.67 machines. (2½)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACHINES :</td>
<td>lie between ¼ of a car and 0.375 of a car. (⅜)</td>
</tr>
</tbody>
</table>

(c) Ireland is promoted abroad as an attractive location for investment by foreign firms.

(i) Discuss **THREE** economic reasons why foreign firms choose to invest here.

1. **Availability of a skilled workforce.**
   Firms have available a large, highly educated and multi-skilled workforce.
   This helps reduce the training costs for these firms.

2. **Low rates of taxation.**
   The rate of corporation profits tax in Ireland is one of the lowest within the EU.

3. **Access to EU market / Member of the euro currency.**
   Firms which locate in Ireland have access to free movement of their goods within the EU.
   Ireland is a member of the euro and this makes payment for international transactions within the eurozone much easier and hence more attractive.

4. **Availability of state incentives.**
   Firms can avail of attractive grants and other incentives provided by the state.
   Examples include: advance factories; serviced industrial estates; contribution towards training costs etc.

5. **Good industrial relations.**
   Social partnerships have resulted in relative industrial peace offering firms uninterrupted production.

6. **Attractive rates of return on investments.**
   Firms locate here because the rate of return on their investment is sufficiently more attractive than available elsewhere.

7. **Availability of an English speaking workforce.**
   An English speaking workforce is a major attraction for foreign firms.

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

9. **Stable economic climate.**
   By international standards Ireland’s economy is performing exceptionally well. This has increased business confidence which encourages firms to locate here.

**Marks: 3 points at 5 marks graded.**
(ii) Describe how these foreign firms, operating in Ireland, may affect Ireland’s Balance of Payments.

**Effect on the Balance of Payments – Current Account.**

1. These foreign firms may bring with them staff/expertise from their home country. Part of the salaries earned may be returned home (invisible imports).

2. Once they establish a plant they will require capital goods and raw materials. Some of these may need to be imported (visible imports).

3. Some foreign firms produce their commodities for export (visible exports).

4. Profitable foreign firms may decide to repatriate their profits (invisible import).

**Effect on the Balance of Payments – Capital Account.**

1. When the foreign firms first come to Ireland they bring with them additional capital investment. This is a long term capital inflow into Ireland.

Marks: 2 points at 5 marks graded.
(a) (i) Explain, with the aid of a diagram of Circular Flow of Income for an open economy, the main elements of aggregate demand.

![Circular Flow of Income Diagram]

**Marks: Diagram – 12 marks graded**

**Explanation of the main elements of aggregate demand: 10 marks graded.**

(ii) Outline the expected effects which an injection of government spending into the economy, could have in each of the following cases:

- a closed economy at less than full employment;
- an open economy at full employment.

(30 marks)

<table>
<thead>
<tr>
<th>A closed economy at less than full employment</th>
<th>An open economy at full employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increase in level of aggregate demand</td>
<td>1. Increase in level of aggregate demand</td>
</tr>
<tr>
<td>2. Increase in the level of <strong>employment</strong></td>
<td>2. Increase in the level of <strong>imports</strong>.</td>
</tr>
<tr>
<td>3. Increase in the level of savings within the economy</td>
<td>3. Increase in the level of savings within the economy</td>
</tr>
<tr>
<td>4. Increase in the level of inflation.</td>
<td>4. Increase in the level of inflation.</td>
</tr>
</tbody>
</table>

8 marks graded
(b) It has been estimated that in an economy, MPM = 0.2, MPT = 0.1 and MPC = 0.9. Calculate the following, showing all your workings:

(i) The size of the multiplier.

\[
\frac{1}{1 - (\text{MPC} - \text{MPM} - \text{MPT})} = \frac{1}{1 - (0.9 - 0.2 - 0.1)} = \frac{1}{0.4} = 2.5
\]

or

\[
\frac{1}{\text{MPS} + \text{MPM} + \text{MPT}} = \frac{1}{0.1 + 0.2 + 0.1} = \frac{1}{0.4} = 2.5
\]

10 marks graded

(ii) The increase in the level of national income if there were an injection of government spending of €500 million.

\[
\text{Injection} \times \text{Multiplier} = \text{Overall Increase in National Income}
\]

\[
€500m \times 2.5 = €1,250m
\]

10 marks graded
“GNP growth of 5% is forecast for 2005”.
Discuss the economic consequences (positive and negative) of economic growth on the Irish economy.(25)

<table>
<thead>
<tr>
<th>Positive economic consequences of Economic growth</th>
<th>Negative economic consequences of Economic growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increased employment.</strong>&lt;br&gt;A rise in GNP will lead to increased demand for goods/services with more labour being demanded to produce these.</td>
<td><strong>Inflationary pressures.</strong>&lt;br&gt;With the rise in the level of economic activity the level of demand inflation will rise.</td>
</tr>
<tr>
<td><strong>Improved government finances.</strong>&lt;br&gt;With a rise in spending – indirect tax revenue rises; more people at work will result in an increase in direct tax revenue; expenditure on social welfare should fall; greater government services possible.</td>
<td><strong>Labour shortages.</strong>&lt;br&gt;The increased demand for goods &amp; services may increase the demand for labour in certain sectors, resulting in labour shortages.</td>
</tr>
<tr>
<td><strong>Effects on Balance of Payments.</strong>&lt;br&gt;If the extra GNP results from increased output and if some of this output is exported then our Balance of Payments position improves.</td>
<td><strong>Demand for wage increases.</strong>&lt;br&gt;Expectations by workers may increase with respect to pay increases.</td>
</tr>
<tr>
<td><strong>Improved standard of living.</strong>&lt;br&gt;Higher GNP will result in increased wealth in the economy allowing consumers to buy more goods and services / a reduction in poverty.</td>
<td><strong>Increased demand for imports.</strong>&lt;br&gt;An increase in GNP increases incomes and spending power and demand for imports may rise, worsening the Balance of Payment position.</td>
</tr>
<tr>
<td><strong>Effects on migration.</strong>&lt;br&gt;If job opportunities exist then people who had planned to emigrate may remain in Ireland and more immigrants may be attracted into the economy.</td>
<td><strong>Pressure in housing market.</strong>&lt;br&gt;The rise in GNP increases spending power further fuelling demand for houses, resulting in shortages and increasing prices.</td>
</tr>
<tr>
<td><strong>Investment opportunities.</strong>&lt;br&gt;Rising GNP indicates a growing economy and this may attract further investment into the economy.</td>
<td><strong>Increased immigration / Displacement of Population.</strong>&lt;br&gt;Rising GNP increases demand and provides more opportunities for employment leading to a possible rise in immigration / and the displacement of population (movement to urban centres).</td>
</tr>
<tr>
<td>Minimum of TWO either side required</td>
<td><strong>Pressure on state infrastructure.</strong>&lt;br&gt;Higher GNP results in greater demand for scarce resources / more damage to the environment / higher incomes will increase demand for commodities i.e. cars etc.</td>
</tr>
</tbody>
</table>

Marking: 5 points at 5 marks graded.
Question 7 – Banking and the Euro

(a) A bank needs to keep a balance between its twin objectives of **liquidity** and **profitability**.
Explain the underlined terms. How does the bank reconcile these twin objectives? (20 marks)

**Liquidity – 4 marks graded.**
- Refers to the need by a bank to have liquid assets so as to meet the demand for cash by its customers.

**Profitability – 4 marks graded.**
- Refers to the need for a bank to make as much profit as possible from its assets for shareholders.

**How does the bank reconcile these twin objectives? – 12 marks graded.**

1. Banks must satisfy their customers need for cash i.e. they must have enough liquidity – they could do this by holding all, their assets in cash.

2. But cash doesn't earn interest and banks also wish to be profitable.

3. Banks have learned from experience that the compromise in having sufficient liquidity and yet earning profits is to hold their assets along the following portfolio:

   (i) It will keep the majority of its assets in the form of Loans and Overdrafts. These assets earn profits but are not very liquid.
   (ii) It will require sufficient assets in cash and liquid form to meet the cash requirements of their customers. These assets are liquid but earn little profit.

**Profitable / Earning Assets are:**
1. Term loans and overdrafts
2. Government stock / gilt edged securities.

**Liquid assets are those which can be turned into cash quickly:** incl.
1. Exchequer Bills / Bills of Exchange
2. Money at call and short notice: can be turned into cash quickly
3. Cash: on deposit in the banks.

<table>
<thead>
<tr>
<th>% of Total Assets</th>
<th>Term loans and overdrafts</th>
<th>Government stock / gilt edged securities</th>
<th>Exchequer Bills / Bills of Exchange</th>
<th>Money at call and short notice</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% of Total Assets

**Liquidity Increases**

**Profitability Increases**

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20
(b) The Central Bank (now called the Central Bank & Financial Services Authority of Ireland) continues to play a very important economic role in the Irish economy. Explain the role it plays in the Irish economy. (30 marks)

(a) **Prints / Issues legal tender.**
- The Central Bank has the sole authority to print and mint euro currency in Ireland.
- It distributes the euro through the financial institutions within Ireland.
- Its mint is located in Sandyford in Dublin.

(b) **Governments Bank.**
All monies received by government are paid into the Government’s account in the Central Bank and all monies paid out by Government are drawn from its account with the Central Bank.

(c) **Bankers' Bank / Regulator of Financial sector / Issues licences to financial institutions.**
- It acts as a Clearing House for the commercial banks who maintain accounts here.
- It regulates the financial sector in Ireland including credit unions, building societies, the IFSC operations, etc.
- The Central Bank acts as lender of last resort.

(d) **Official external reserves.**
- These are this country’s official holdings of gold, foreign currencies and other reserves held as security against the issue of the euro.
- The Central Bank manages these reserves on behalf of the country.

(e) **Maintains Price Stability.**
The key role the Central Bank plays is to maintain price stability through its monetary policy operations so as to ensure competitiveness within the EU. This it does through various measures: Main refinancing operations, Standing Facilities and Minimum Reserve Requirements.

(f) **Provides Consumer Information / Economic Research – Central Bank Reports.**
The Central Bank regularly provides information on all aspects of the economy through its Central Bank reports and provision of statistics relating to the Irish economy. It also conducts research on various matters concerning the economy.

Marking: 5 points at 6 marks graded.
The euro is now well established as a currency in Ireland. Discuss the economic effects which the introduction of the euro has had on: Irish consumers; Irish exporters and importers.  

<table>
<thead>
<tr>
<th>Irish consumers</th>
<th>Irish exporters and importers</th>
</tr>
</thead>
</table>
| **1. Foreign Travel.**  
No foreign exchange costs / no conversion charges apply to those travelling within eurozone countries. | **1. Exchange risk eliminated.**  
No devaluation or revaluation has taken place resulting in increased certainty in international trade. |
| **2. Inflation.**  
The introduction of the euro led to inflation within this country in the immediate aftermath of its introduction. | **2. Easier payment for trading.**  
As no conversion charges apply to trade within the eurozone this facilitates speedier payment. |
| **3. Price comparisons.**  
Can now be made within all eurozone countries, allowing for greater transparency. | **3. Lower interest rates.**  
One of the major benefits of the euro has been access to lower competitive interest rates for firms. |
| **4. Greater choice of financial products.**  
Irish consumers can now choose where to save, borrow, invest and seek insurance thereby facilitating increased competition. | **4. Cost of imported raw materials / capital goods.**  
These should now be more competitive due to open competition, the absence of currency fluctuations and more transparency in international pricing. |
| **5. Greater awareness / competition.**  
The euro has resulted in greater awareness as regards prices and Irish consumers can now seek better value for their euro. | **5. Pressure for domestic competitiveness.**  
Employees are becoming increasingly aware that success as an economy depends on being competitive and this has ensured moderation in wage increases. |
| **6. Prudent management of the economy.**  
Membership of the euro constrains the government in relation to economic policy and ensures prudent management occurs. | **6. Increased trade opportunities.**  
Access to EU markets is easier and leads to greater opportunities. |
| **7. Low interest rates.**  
The lower interest rates since the introduction of the euro have benefited consumers, resulting in increased borrowings. | **7. Fluctuating value of the euro.**  
Companies whose main market is UK/US, have been affected by the fluctuating value of the euro resulting in a loss of competitiveness. |

Marking: 5 points at 5 marks graded.
Question 8 – Population, Labour and Economic Policy

(a) The last census of population (in 2002) showed that the Irish population continues to grow and now exceeds 3.9 million. Discuss the economic consequences of an increasing population. (25 marks)

1. Increased demand for goods & services / Larger domestic market.
With a rising population the demand for goods & services within the country increases. This may lead to increased opportunities for investment. Firms which increase output may benefit from economies of scale.

2. Increased pressure on services / Increased utilisation of services.
A rising population may put further pressure on essential services e.g. health services, schools etc. However if the population lives in under-populated areas then services will be more fully utilised.

3. Increased pressure on the country’s infrastructure / sector shortages.
Greater pressure is exerted on the infrastructure of the country leading to bottlenecks e.g. increased traffic jams. If the increased population had not been planned for adequately then shortages will develop in certain sectors i.e. housing, education, social services etc.

An increase in population should lead to an increase in planning by both central and local authorities for future development/provision of services.

5. Decreased Dependency ratio.
The numbers joining the labour market may increase making it important for the government to prioritise the creation of employment. These increased numbers in the labour force will lower the dependency ratio and lead to increased tax revenues for the state.

6. Land values.
As population density increases, available land becomes scarce and hence the price of land increases.

7. Decrease in average age of population / Increased dependency ratio.
If the increase is due to an increase in the birth rate then: the average age of the population falls. The increased dependency ratio will require additional state funding / taxes.

Marking: 5 points at 5 marks graded.
1. **Increased demand for goods & services.**
The level of demand for goods and services will increase leading to greater opportunities for businesses. Lifestyles acquired abroad provide opportunities for the development of business, providing goods and services to match.

2. **Maintaining essential services.**
The inflow of labour to fill vacancies which may exist in the labour market will help ensure that essential services are maintained e.g. the health sector, at present.

3. **Eased pressure on wage rates.**
With the increase in the labour supply there will be less pressure on the wage rates, helping competitiveness in the economy.

4. **Improved state finances.**
With an increased labour supply the government will be able to raise additional direct and indirect taxation revenues.

5. **Greater utilisation of services.**
If the labour locates in low density population areas then services will be more fully utilised.

6. **New skills / traditions within society.**
The economy will benefit from the new skills/traditions developed abroad and brought into Ireland. These skills could result in increased opportunities for specialised businesses.

**Marking: 4 points at 5 marks graded.**
(c) (i) One of the government’s economic aims is to achieve balanced regional development. Outline FOUR possible government policies to achieve this aim.

**Decentralisation of the public service.**
By locating government departments in local regions additional income is generated through the multiplier effect, thus aiding economic development in regional areas.

**Tax and other Incentives to attract industry.**
If additional incentives are provided to industry in specific target areas then more firms will locate there promoting economic development.

**Investment in the infrastructure.**
If investment in the social infrastructure takes place, then this improvement will make these regions more attractive to live in, boosting the working population and making such communities viable places to live, work and invest in e.g. the Ballymun Regeneration Project.

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

**Upgrading of 3rd Level Training and Educational facilities.**
The provision of adequate 3rd level educational facilities / training networks are a pre-requisite for attracting high value-added businesses to the regions.
The availability of courses in ITs and other Colleges in regional areas encourages enterprise in these areas, further facilitating economic development.

**Improved Access to and from the regions.**
Tourist organisations in the regions state the lack of direct international flights into these regions as a major deterrent to attracting tourists / businesses into these regions. Investment in the road and rail networks will also improve access.

**Easing of planning restrictions in building residential property.**
Easing of planning restrictions on the building of residential property will encourage more people to live and work in these areas, boosting economic development.

**Providing Leadership Programmes.**
Such programmes support local communities in developing these localities. By identifying opportunities and aiding in research, training and promotion these programmes encourage initiative and should aid regional development.

**Government Spatial Strategy.**
The aim to create hubs and gateways within the regions in Ireland is to encourage towns within the regions as centres for development and this development should have a ripple effect on the surrounding communities.

Marking: 4 points at 4 marks graded.
(ii) Policies to achieve balanced regional development may make it more difficult for the government to achieve other economic aims”. Explain this statement, using examples to support your answer.

Achieving balanced regional development may involve increasing government expenditure which makes it difficult to achieve other objectives i.e. curtailing government expenditure.

**Explanation: 4 marks graded.**

1. Encouraging more people to live in these areas may cause property prices to increase – contrary to the stated policy of creating affordable housing.

2. Improving the infrastructure in the regions requires increased expenditure – thereby reducing the expenditure required to improve state services nationally i.e. the health service.

3. Policies to achieve industrial development in the regions may conflict with other policies to promote tourism in regional locations.

4. Increased regional industrialisation may be at a cost of increased social costs such as pollution, congestion and increased local government charges.

**Marking: 2 points at 5 marks graded.**

*Note: The examples chosen must be related to regional development.*