Scéimeanna Marcála  
Scrúduithe Ardteistiméireachta, 2001

Eacnamaíocht  
Ardleibhéal

Marking Scheme  
Leaving Certificate Examination, 2001

Economics  
Higher Level
MARKING SCHEME
and
NOTES
for use with the Marking Scheme

- 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.
Section A (100 marks)

1. What is meant by the concept 'consumer surplus'?  
   This is the difference between what the consumer actually pays for the good & what he/she would be willing to pay for the good, rather than do without the good.  

   Marking scheme: 16 marks graded

2. State TWO non-insurable risks, which an entrepreneur faces.  
   1. Loss of profit / Increases in the costs of production.  
   2. Bad decision-making.  
   3. Industrial relations disputes / strikes.  
   4. Changes in taste or fashion.  
   5. Entry of competition into the industry.  
   6. Changes in competitive conditions i.e. new legislation; new trading agreements.  

   Marking Scheme  
   2 points at 8 marks each graded

3. Define SOCIAL COSTS. Give TWO examples.  
   Price which society has to pay for the existence of a particular good / service.  

   Definition: 10 marks graded

   Examples: 2 examples at 3 marks each = 6 marks  
   1. Pollution of air/water.  
   2. Noise nuisance  
   3. Disfigurement of the landscape.  
   4. Traffic congestion.  
   5. Reduction in public amenities / urban sprawl.
4. State THREE economic benefits of economic development to the citizens of underdeveloped countries.  

1. Improved standard of living / increased GNP per head.  
2. Increased Employment opportunities.  
3. Increased resources available to the governments / infrastructural developments – internally (extra tax revenue) / externally (development agencies).  
5. Investment in research and development/ more monies available for investment – aiding economic growth.  
6. Improved quality of life/welfare e.g. improved health/education/increased leisure time.  
7. Improved opportunities for trade – more scope for exports.

<table>
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<tr>
<td>3 clearly stated points: 6 + 5 + 5 marks = 16 marks</td>
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5. Identify TWO means by which semi-state companies which are monopolies could be made operate more cost effectively.  

1. Allow more competition in the sector / deregulation / e.g. electricity provision.  
2. Allow the companies form strategic alliances e.g. Aer Lingus  
3. Rationalise the company: reduce labour costs / discontinue unprofitable services.  
4. Appoint only those members to the boards who have proven expertise in the relevant areas.  
5. Reduce the extent of government interference in the day to day running of the companies e.g. Aer Lingus / RTE  
6. Privatise the company – this will enforce efforts towards costs reduction.

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6. With the aid of a clearly labelled diagram, explain the relationship between the average and marginal costs. \(\text{(17 marks)}\)

**Diagram**: (8 marks)

- Cost axis: 2 marks
- Quantity Axis: 2 marks
- AC: 2 marks
- MC: 2 marks [-2]

MC must cut AC at its lowest point.

**Explanation**: (9 marks)

- When MC > AC then AC is rising: 3 marks
- When MC < AC then AC is falling: 3 marks
- When MC = AC then AC is at a minimum/constant: 3 marks

7. State THREE roles of profits in a market economy. \(\text{(17 marks)}\)

1. Encourages risk taking.
2. Indicates the best use of resources / consumer demand (what goods and services consumers want)
3. Encourages investment.
4. Provides funds for expansion.
5. Normal profit ensures that production continues.
6. SNP is the reward for cost reduction and the development of new ideas / reward for efficiency.
7. Source of revenue for the government.
8. SNP's act as a signal to other firms to join the industry.

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8. State THREE contributions made to economic thought by the Monetarists \(\text{(17 marks)}\)

1. **Monetary policy** should be the main instrument used by the government to manage the economy.
2. **Control of money supply** monetarists suggest strict control so as to control inflation.
3. **Reduced inflation**
this increases competitiveness and may lead to increased exports.

4. Laissez faire principles
favour a return to laissez faire principles - with minimum state intervention - e.g. they favour privatisation.

5. Supply side policies
do not favour attempts to influence the supply of labour i.e. reducing the ability of trade unions to interfere with the labour market.

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<td>A full statement is required in each case.</td>
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</table>

9. A country is said to be overpopulated in the economic sense when: (17 marks)

- It has **too many people in relation to the other production resources**.
  
  2 underlined terms: 9 marks + 8 marks

- The **resources of a country are incapable of supporting any more people**.
  
  2 underlined terms: 9 marks + 8 marks

- An **increase in population leads to a decrease in GNP per head**.
  
  2 underlined terms: 9 marks + 8 marks

- **Diminishing returns to labour given the existing economic resources**.
  
  2 underlined terms: 9 marks + 8 marks
Q1 IMPERFECT COMPETITION

(a) State and explain the assumptions underlying the theory of imperfect competition. (25 marks)

1. **There are many buyers / sellers in the industry.**
   - No individual buyer can influence, by his/her own actions the market price of the goods.
   - An individual seller can influence the quantity sold by the price it charges for its output.

2. **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 names.

3. **There is freedom of entry to 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.

4. **Perfect/Reasonable knowledge as to profits made by other firms.**
   - In the market everyone concerned has perfect / reasonable knowledge as to profits made by other firms in the industry.
   - Consumers may not be aware of the prices being charged for different products.

5. **Each firm tries to maximise profits.**
   - The aim of each firm is produce that quantity where $MC = MR$.

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**Marking scheme**

State: 5 points at 3 marks each = 15 marks

Explain: 5 points at 2 marks each = 10 marks.
(b) Draw the demand curve which faces a firm in imperfect competition and justify its shape.  

**Diagram**

Because there are many goods, which are close substitutes, if a firm increases its price, there will be a reduction in demand, as some consumers will switch to the competitive goods, which have become relatively cheaper.

If a firm lowers its price it will increase its sales, as some consumers of other substitute goods will switch to this firm's good because it is relatively cheaper.

Either of the above points

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(c) Discuss, with the aid of a clearly labelled diagram, the implications of the assumptions in (a) above on the equilibrium of the firm in the long run under conditions of imperfect competition.  

**Diagram**

Marking Scheme for Correct Diagram – 18 marks:

**Labelling**

Price axis, Quantity axis, AR (D), MR, AC and MC: 6 at 1 mark each

**Equilibrium output:**

Point A (where MC = MR and Output produced Q): 6 marks
**Equilibrium price:**
Point B (where AR = AC and Price charged P): 6 marks

**Diagram – Repeated**

![Diagram of supply and demand curves with labels: P, Q, MR, AC, MC, D=AR, B.](image)

**Marking Scheme for Correct Diagram – 18 marks:**

**Labelling**
- Price axis
- Quantity axis
- AR (D)
- MR
- AC and MC
  - 6 at 1 mark each

**Equilibrium output:**
- Point A (where MC = MR and Output produced Q): 6 marks
- **Equilibrium price:**
- Point B (where AR = AC and Price charged P): 6 marks

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**Option A: Candidate assumes short run as starting point**

1. In the short run **super normal profits may exist** within the industry, because there is:
   - (a) **Perfect knowledge of profits** and
   - (b) **Freedom of entry** into the industry
     - New firms are attracted into the industry.

2. As these firms enter the **existing firms within the industry** will lose some of their share of the market – the demand curve facing each individual firm will shift into the left.

3. This adjustment will continue until the **super normal profits are eroded** and there is no further incentive for new firms to join the industry.

4. So each individual firm achieves long run equilibrium when:
   - a) **MC = MR** and MC is rising (Point A on the above diagram);
   - b) **AR = AC** (point B on the above diagram), the firm is covering its long run costs.

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**Marking scheme: 12 marks graded**
(d) State ONE FEATURE of this firm in long run equilibrium, which would be common to a firm in long run equilibrium under EITHER perfect competition OR monopoly. (10 marks)

<table>
<thead>
<tr>
<th>Perfect Competition</th>
<th>Monopoly</th>
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<tbody>
<tr>
<td>1. Both earn Normal Profit. AR = AC.</td>
<td>1. Both wasteful of resources. (Neither produces at the lowest point of average cost).</td>
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<td></td>
<td>2. Downward sloping D/C. Both must lower P to increase QD</td>
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<td>3. Price exceeds marginal cost.</td>
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One feature clearly stated: 10 marks

Q2 PRICE ELASTICITY OF DEMAND

(a) Define what is meant by price elasticity of demand. (10 marks)

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.

- Responsiveness of QD to changes in the price of the good itself.

Marking Scheme
10 marks graded

(b) A consumer buys 80 units of a good when the price is £1.50. The price increases to £1.75 and the consumer now buys 70 units.
(i) Using the formula below, Calculate the consumer’s price elasticity of demand. Show all your workings.

\[
\frac{Q}{P} \times \frac{P_1 + P_2}{Q_1 + Q_2}
\]

(ii) Is demand for this good elastic, inelastic or unitary elastic?
(iii) The seller of the above good wishes to earn maximum revenue. What changes, if any, should the seller make in the selling price of the good to earn maximum revenue? Explain your answer. (35 marks)

\[
\begin{align*}
\text{(i)} & \quad -10 \quad \left[ \frac{\£1.50 + \£1.75}{80 + 70} \right] \\
& \quad + 25p \quad \left[ \frac{\text{or}}{25} \right] \\
& \quad -10 \quad \frac{\£3.25}{150} \\
& \quad + 25p \\
\end{align*}
\]

4 figures @ 4 marks each = 16 marks
Answer, PED = \[-0.866\]

Correct Sign: 3 marks    Correct value: 3 marks

(ii) Demand for this good is inelastic: 3 marks

(iii)
1. The seller should increase the price of the good.
2. This will cause the demand for the good to decrease.
3. However the percentage drop in the demand for the good is small relative to the price change in percentage terms. The revenue gained from the rise in price outweighs the revenue lost from the subsequent fall in demand.
4. Total revenue will increase.

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<tbody>
<tr>
<td>Increase in price:</td>
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<tr>
<td>Decrease in demand:</td>
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<tr>
<td>% increase in P exceeds % drop in demand:</td>
</tr>
<tr>
<td>so Total revenue will increase:</td>
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(c) State and explain FOUR factors that affect price elasticity of demand (30).

1. The availability of close substitutes.
   - When a good has a close substitute and its price is increased, the demand for the good will be elastic because people will switch to the cheaper substitute.
   - Where a good has no substitutes and its price is increased there is no substitute to switch to and so it will be inelastic.
   - The closer the substitutability between goods the more consumers will tend to switch their purchasing behaviour in response to a change in relative prices and thus the greater will be PED.

2. Complementary goods.
   - If the good in question is the cheaper of two goods, which are in joint demand, then the demand for it is likely to be relatively inelastic in response to changes in its own price.

3. Is the commodity a luxury or necessity?
   - It is not vital that one should possess luxuries and therefore the PED for them will be relatively elastic.
   - Necessities are vital for life – people must buy them even when their price is increased – and so their PED will be relatively inelastic.
4. The proportion of income which is spent on the commodity.
   - In general the greater the proportion of income which is spent on a good, the more elastic is demand for it likely to be in response to a change in its own price – because the more important is a change in its own price.
   - A rise if 50% in the price of a box of matches is unlikely to have a significant effect on the demand for it.

5. The durability of the commodity.
   - The more durable the commodity, the more elastic is the demand for it likely to be in response to a change in its own price.
   - If products such as motorcars increase in price, it is likely that the public will extend the life of their existing model and postpone the purchase of a replacement.

6. Expectations as to future changes in price.
   - If, in the face of a price reduction, the public considers that prices are likely to fall even further, they may wait for the further reduction in price, in which case demand may not be very elastic to the initial price reduction.

7. The length of time allowed for adjustment to price changes.
   - The longer any price change persists, the more elastic will be demand.
   - If the price of electricity rose by 80% a consumer may economise on the use of various appliances in the short term. In the long term the consumer will have to consider substituting other forms of energy. The longer the time period available to figure out possible changes, the more electricity will be saved. The demand will at first be highly inelastic but as time goes on will become more elastic.

8. Consumer habits / brand loyalty.
   - A consumer may become strongly attached to a particular product through habit or loyalty to that brand. An increase in price of that good will not cause him/her to consume less of the product or to switch to cheaper substitutes. The demand for such goods will therefore be price inelastic.

9. The number of alternative uses the good has.
   - A commodity, which has a large number of uses, will usually have a relatively elastic demand. For example sugar is demanded for direct consumption, sweetening purposes, baking, food processing etc. Any increase in the price of sugar may only result in a small decrease in its demand in each of these markets but the total overall drop in demand could be significant.

Marking scheme
4 points: 8 + 8 + 7 + 7 = 30 marks.
State: 4 x 3 marks each. Explain: 5 + 5 + 4 + 4 marks.
The explanation must state whether PED is elastic/inelastic as a result of the factor identified.
(a) State FOUR factors that affect the supply of a good, other than the price of the good itself, and explain how each factor affects supply. (25 marks)

1. The cost of producing the product.
If there are increases in costs of factors of production, which a firm uses in the production of its good, then it will be more costly to manufacture the good. The firm will not continue to supply the same quantity of the good at the old price – hence there will be a reduction in the quantity supplied.

2. The state of the firm’s production technology.
As new machinery is invented, as labour becomes more specialised and efficient the factors of production become more efficient. It becomes possible to increase their output even though the payments they receive remain the same. A technological improvement means that the supplier can use inputs more efficiently, and the cost of producing a unit of output falls.

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

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

5. Taxation / Subsidy. (Either bulleted point)
   - If the government were to reduce the rates of taxation on raw materials used in the manufacture of a commodity, this represents a reduction in the cost of production and hence quantity supplied could increase.
   - If a subsidy is granted on the raw materials or on the labour employed by the firm, this has the effect of reducing costs and thereby could result in an increase in the quantity supplied.

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

7. Objectives of the firm.
If the objectives of the firm changed from profit maximisation to a deliberate reduction in output by firms in the industry then quantity supplied would fall.
8. Time period available to adjust supply.
The longer the time available the more elastic is supply e.g. in the short term the
supply of fresh fish caught daily is totally inelastic but over time it becomes more
elastic.

Marking Scheme: 4 points: 7 + 6 + 6 + 6 = 25
State: 4 at 3 marks = 12mks. Explain 4 points clearly at 4 + 3 + 3 + 3

(b) State and explain the principal economic assumptions made about consumer
behaviour.  

1. The consumer has a limited income.

- The consumer’s income is not large enough to satisfy all his/her needs and
  wants.
- Therefore the consumer must **choose** between those goods he/she wishes to
  buy.

2. The consumer seeks to get maximum satisfaction [utility] from that
income / obeys the Equi-Marginal Principle of Consumer
Behaviour.

- Consumers will spend their limited income in such a way that they will
  achieve the most satisfaction / best value for money.

3. The consumer acts rationally.

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

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

- As consumers consume additional units of a good, their marginal utility for
  this good will eventually decline.

Marking Scheme: 3 points : 9 + 8 + 8
State: 3 points at 5 marks each = 15 marks.
**Explain** clearly: 3 points at : 4 + 3 + 3
c) The law of diminishing marginal utility states that as additional units of a good are consumed the marginal utility of this good will eventually decline.
   (i) State and explain the assumptions underlying the law of diminishing marginal utility
   (ii) Give TWO examples of commodities, which do not comply with this law.

Justify each choice with a brief explanation. (25 marks)

(i) Assumptions underlying the law of diminishing marginal utility:

1. **It applies only after a certain point called the origin.**
   The origin is the minimum quantity of the commodity, which can be used effectively, and until this stage has been reached marginal utility may not diminish.

2. **Time has not elapsed for circumstances to change.**
   - The law assumes that the consumer's taste do not change.
   - The nature of successive units of the commodity does not change.
   If a person eats a number of oranges, each additional orange consumed will give diminished marginal utility. However, if a person eats one on a Monday, one on a Thursday and one on Sunday, because of the time which has elapsed between the consumption of each extra orange, marginal utility may not diminish.

3. **It assumes that income doesn't change.**
   If income rises or falls then marginal utility may not decline as consumption increases.

4. **It does not apply to addictive goods / medicine.**
   In the case of goods to which one becomes addicted the law does not apply.
   The consumer may gain increasing marginal utility by consuming each additional unit.

   Marking Scheme : 3 clearly stated points x 5 marks each = 15 marks

(ii) Give TWO examples of commodities, which do not comply with this law.
   Justify each choice with a brief explanation.

1. **Medicine**
   The second dose may be just as important as the initial one.

2. **Addictive Goods e.g. alcohol / cigarettes**
   The consumer's marginal utility will not decline because each extra unit consumed brings the consumer additional marginal utility.
3. Goods/services where consumers need to develop a taste for the commodity e.g. health foods

4. Goods that give increased marginal utility.
e.g. a unique stamp collection.

| 2 examples at 5 marks each = 10 marks |
| State: 2 at 3 marks = 6mks. Explain: 2 at 2 marks. = 4 marks |

**Q4 LABOUR MARKET**

(a) A principal factor determining the wages to be paid to a worker 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 wage rates paid to different categories of workers. (30 marks)

(i) MRP of labour – 10 marks

the extra revenue earned when an additional unit of labour is employed

| Marking Scheme : 10 marks |
| Extra Revenue: 5 marks; Additional unit of labour: 5 marks |

(ii) Discuss the factors, other than MRP, which influence the wage rates paid to different categories of workers. (20 marks)

1. Different skills.
The skills attaching to different jobs vary and pay is commensurate with the level of skill involved.
e.g. a doctor receives a higher rate of pay than that of a nurse.

2. Training.
Workers who undergo longer periods of training will receive higher levels of pay.
e.g. a nurse who trains and becomes more specialised will receive higher pay.

3. Educational qualifications.
Generally wage levels recognise the educational qualifications achieved by the worker.
e.g. a teacher with an honours degree receives a higher allowance that a teacher with a pass degree.
These may vary between jobs and pay levels will reflect this
e.g. dangerous work, unsociable hours, the temporary nature of the job.

5. Negotiating strength of the workers trade union.
If a worker is a member of a strong trade union this union may obtain wage levels in line with that workers MRP.
e.g. recent negotiations by the trade unions in the ESB.

6. Tradition attaching to certain jobs.
It has been possible for those involved in the self governing professions i.e. those in the legal / accountancy professions to maintain high pay levels because of the tradition, which is attached to such professions.

7. Possession of innate talents.
Some people possess certain talents and hence may be able to earn very high incomes e.g. sports stars, those in the entertainment industry.

8. Gender Bias.
Despite legislation a bias exists in the payment of women in the Irish workforce. Women workers in Ireland earn roughly 80% to that of their male counterparts.

9. Monetary & Non-Monetary benefits of the job.
Workers in difference jobs may receive other benefits: low interest loans, pension entitlements, VHI/BUPA subsidised, long-holidays, subsidised travel etc.

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<tr>
<td>Explain: 4 points @ 3 marks each = 12 marks</td>
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(b) How appropriate is MRP for setting wages in the public sector?

Explain your answer. (20 marks)

1. Not all workers in the public sector produce physical output and hence it is difficult to calculate that worker’s marginal physical output e.g. teachers.

2. For those workers in the public sector who produce physical output this output may not be sold in the marketplace. It is difficult to calculate the marginal revenue (selling price) for the output produced e.g. a carpenter in the office of public works.

3. Where a combination of capital and labour is required to carry out an economic activity e.g. a civil servant and a computer it is not possible to allocate an MRP to the civil servant alone.

4. Pay comparability: because productivity is difficult to measure it may be best to compare those workers in the public sector with those workers in the private sector doing similar work and set pay levels accordingly i.e. account for the net-benefits of the job.
c) At present, the demand for labour exceeds the supply of labour in certain sectors of the Irish economy. Discuss the possible effects, which this situation may have on the Irish economy.

1. **Pressure on wage levels to rise / industrial Unrest / inflationary pressures.**
   Employers will be forced to increase wage levels in order to attract workers into those areas where shortages are occurring. If wage levels increase such increases may be passed on to the final consumer in the form of higher prices.

2. **Deterioration / Loss of services.**
   Where workers are not available it will result in either a deterioration of services in those areas or a total loss of certain services e.g. the health/education sectors.

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

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

5. **Difficulty of attracting / keeping workers in some sectors.**
   With current labour shortages and the attractiveness of higher pay in alternative employment, certain sectors find it increasingly difficult to attract workers e.g. in the hotel, catering, and tourism industries.

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

7. **Reduction in Government Social Welfare Bill**
   With shortages in labour, unemployment falls, resulting in a reduced social welfare bill for the government.

8. **Increased Training Costs.**
   To meet the labour shortages industry / the government must increase the amount of training places available and this will increase costs of training.
9. Changed composition of the Irish labour force
School children ‘attracted’ to early leaving, more housewives / retired workers being enticed into labour force.

Marking scheme : 5 points at 5 marks each.
State: 5 x 3 marks each = 15 marks. Explain: 5 x 2 marks each = 10 mks

Q5 TRADE & THE EURO

(a) Define clearly ANY THREE of the following terms:
(i) Invisible Exports;
(ii) Tariffs;
(iii) Balance of Payments on Current Account;
(iv) Balance of Payments on Capital Account. (25 marks)

(i) Invisible Exports

- The purchase of Irish services by foreigners.

(ii) Tariffs

- This is a tax/duty on imports.

(iii) Balance of Payments on Current Account

This is the difference between total exports and total imports
Or
[Visible + Invisible exports] − [Visible + Invisible Imports]

(iv) Balance of Payments on Capital Account

This is a record of a country’s inflow and outflow of capital for investment.

Marking Scheme
3 points at 9 + 8 + 8 marks.
2 key points in each definition at 5 + 4, 4 + 4 and 4 + 4 marks.
(b) Irish exports have been steadily rising in recent years. Discuss how this development affects each of the following:

(i) the level of Irish imports;
(ii) the amount of borrowing by the Irish government. (25 marks)

(i)

1. Higher demand for (consumer) goods:

There will be increased incomes, leading to increased spending and this may lead to a rise in the demand for imports of consumer goods.

2. Higher demand for capital goods:

The increase in demand will lead to increased domestic production and firms may require more capital goods / raw materials - which may need to be imported.

(ii)

1. Increased Tax Revenue

With the increased spending within the economy and the possible rise in employment the government will receive additional direct and indirect tax revenue - reducing its need for borrowing. Increased exports lead to increased profits resulting in increased CPT revenues.

2. Reduced Government Expenditure

With the increase in employment there will be a decrease in the numbers 'signing on' and this will result in a reduction in expenditure - reducing the need for borrowing.

Marking Scheme 7 + 6 + 6 + 6 marks
State: 4 points @ 3 marks each = 12 marks
Explain: 4 points @ 4 + 3 + 3 + 3 = 13 marks
(c) Discuss the possible effects on the Irish economy of the EURO Declining in value relative to other international currencies. (25 marks)

1. Imports from Non-Euro Countries
   - Price of imports from non-euro countries has increased.
   - This has resulted in a higher import bill for Irish producers / reduction in the demand for imports.
   - It is now more costly for Irish tourists to visit non-euro countries.

2. Exports to Non-Euro Countries
   - Price of exports to non-euro countries has decreased.
   - This has resulted in greater exports to these counties / reduced export earnings.
   - It is now more attractive for tourists from non-euro countries to visit Ireland.

3. Inflationary pressures on Irish economy
   - With higher import prices pressure on domestic prices has increased – e.g. higher oil prices.

4. Increased wage demands.
   - Increased inflation in Ireland in the past year, resulted in trade unions re-negotiating PPF and being granted pay increases above those originally negotiated.

5. Changes in interest rates.
   - The ECB, with the intention of reducing inflationary pressures, reduced interest rates twice during the past year.

   - With exports more competitive, demand will increase resulting in increased employment.
   - Less trade risk for countries trading in Euro will boost trade and hence employment.

Marking Scheme 7 + 6 + 6 + 6.
State: 4 points @ 3 marks each = 12 marks
Explain: 4 points @ 4 + 3 + 3 + 3 = 13 marks
Q6 INFLATION

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

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Income spent on Item(s)</th>
<th>Prices of Item(s) in base year</th>
<th>Price of Item(s) in current year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>35</td>
<td>£8.50</td>
<td>£12.75</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>15</td>
<td>£37.50</td>
<td>£45.00</td>
</tr>
<tr>
<td>Other Items</td>
<td>50</td>
<td>£20.00</td>
<td>£35.00</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(20 marks)

Price index for the current year

<table>
<thead>
<tr>
<th>Category</th>
<th>Prices of Item(s) Base Year</th>
<th>Calculation of Simple Price Index</th>
<th>X Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>£8.50</td>
<td>£12.75 X 100 = 150.00</td>
<td>£150.00 X 35% = £52.50</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>£37.50</td>
<td>£45.00 x 100 = 120.00</td>
<td>£120.00 X 15% = £18.00</td>
</tr>
<tr>
<td>Other Items</td>
<td>£20.00</td>
<td>£35.00 x 100 = 175.00</td>
<td>£175.00 X 50% = £87.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Price Index for the Current year</td>
<td>£158.00</td>
</tr>
</tbody>
</table>

Or prices have risen by 58%.

Marking Scheme
1. Calculation of SPI for each category
   Per category: 4 figures @ 1 mark each = 3 x 4 marks = 12 marks
2. SPI x weight
   Per category: 2 figures @ 1 mark each = 3 x 2 marks = 6 marks
3. Correct Answer: 2 marks
(b) Does the CPI accurately measure changes in the cost of living in Ireland? Explain your answer (30 marks)

NO, the CPI does not accurately measure changes in the cost of living for the following reasons:

<table>
<thead>
<tr>
<th></th>
<th>Limitations of an average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As it represents the average spending patterns of the total population, it may not represent accurately particular groups in the population e.g. non-smokers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Static weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The weights used are those which apply in the base year. The importance of some items in the base year changes over time because of changes in prices, taste and income. The information collected under the Household Budget Surveys may not be accurate e.g. respondents underestimating the amount of income spent on alcohol.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>New products</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>As it includes only those products in the base year it lags behind consumer trends and fashions. New products are not included in the index.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Quality of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>The index does not take account of changes in the quality of products. Higher prices may reflect an improvement in the quality of the product.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Rural v. Urban lifestyles</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Both urban and rural households are represented by the present set of weights but this may not reflect accurately changes in their respective cost of living. It disregards consumption of own produce.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Switching by consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>When prices rise the CPI does not measure the extent to which people may switch to cheaper brands.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Measures changes to prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>not changes in the cost of living because it doesn’t take into account all the items, which affect people’s living standards, i.e. income tax, social welfare etc.</td>
</tr>
</tbody>
</table>

State: 6 at 3 marks = 18. Explain clearly: 6 at 2 marks = 12 marks (30 marks)
(c) Over the past year the rate of inflation, as measured by the CPI, has fluctuated. Discuss the effects of this development on the Irish economy. (25 marks)

Note: The following sample answer outlines the effects of rising inflation on the economy. Alternative answers were also accepted.

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

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

3. Loss of International competitiveness
If inflation in Ireland is high relative to our trading partners, it will result in a loss of competitiveness in our exports abroad – possibly lower exports.

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

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

6. Savings discouraged
If our 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.

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

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

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

With falling exports and rising imports our BOP position deteriorates.
11. Increased uncertainty/ Difficult to plan investment.
Rising inflation creates uncertainty, which is generally unfavourable to investment decisions.

<table>
<thead>
<tr>
<th>Marking Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State:</strong> 5 points @ 2 marks each = 10 marks</td>
</tr>
<tr>
<td><strong>Explain:</strong> 5 points at 3 marks each = 15 marks</td>
</tr>
</tbody>
</table>

**Q7 GOVERNMENT & TAXATION**

(a) Define clearly the following terms: (20 marks)

(i) Current Budget Surplus

- Current government revenue exceeds current government expenditure.

(ii) Exchequer Borrowing Requirement

- Borrowing by the state to finance a current budget deficit and borrowing for capital purposes.

(iii) The National Debt

- Is the total amount of money borrowed by the government, which is outstanding.
- The cumulative total of outstanding government borrowing.

<table>
<thead>
<tr>
<th>Marking Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 clearly defined terms : 7 marks + 7 marks + 6 marks</td>
</tr>
</tbody>
</table>

(b) Discuss the main characteristics of a good system of taxation. (20 marks)

1. **Equity**
The tax levied should be related to the person’s ability to pay.

2. **Certainty**
The amount of tax which a person must pay should be certain and clear/not arbitrary.
3. Convenience
The manner and timing of payment of the taxes should be convenient to the taxpayer e.g. the PAYE system of tax is convenient because it is deducted at regular intervals rather than one lump sum.

4. Economy
The cost of collection should be small in relation to the amount of revenue to be collected. The tax collected should exceed the cost of collection.

5. Not act as a disincentive.
High marginal rates of tax may discourage workers from working overtime. High tax rates on profits may discourage investment.

6. Aid the redistribution of income.
A good tax system should help the government redistribute income from the rich to the poor – progressive taxes allow the government to do this.

7. Be variable / flexible / adjustable.
Taxes should be capable of being varied upwards or downward to suit government policy.
Tax structures and the rates at which individual taxes are levied must be flexible to be capable of meeting new circumstances.

8. Be consistent with national economic objectives.
The taxes levied should help the government achieve its other objectives. e.g. raising excise tax rates on cigarettes could help discourage smoking.

9. Have a stabilising influence on the economy.
A good system of taxation can prevent the level of economic activity rising as fast as it otherwise could when the economy is on an upturn, and prevent the level of economic activity falling as fast as it otherwise could in a recession.

10. Evasion should be impossible
A good tax should be impossible to evade – otherwise the tax is not fair or convenient.

Marking Scheme: 5 points x 4 marks each.
State: 5 x 2 marks each = 10 marks. Explain: 5 x 2 marks each = 10 marks

(c) Discuss the main effects on the Irish economy of the reduction in rates of income tax in recent Government Budgets. (25 marks)

1. Reduced direct tax revenue
Income tax revenue for the government may fall and the government may seek alternative sources of income, such as increasing indirect tax, borrowing or reducing expenditure.
2. Increased incentive to work / save
With the tax reduction workers may be prepared to put in additional effort as they now have higher disposable income. They may also decide to save more.

3. Black economy
People may be more prepared to declare their income for tax purposes resulting in a possible reduction in the size of the black economy.

4. Increased disposable income / Increase in demand / Inflation pressures.
With increased purchasing power, demand for goods and services could rise. This may result in increased inflation and/or increased imports.

5. Employment / Investment Opportunities / Incentives to invest.
Increased demand may result in higher domestic production, resulting in increased employment opportunities and/or presenting opportunities for increased investment.

6. Reduced emigration / Increased Immigration
In the past high taxes encouraged emigration. With a fall in taxes people receive greater reward for their effort and this may stem the 'brain drain'. The reduction in taxes may also encourage immigration into Ireland.

7. Moderation in wage demands / less industrial unrest
The demand for wage increases may be moderated and this may lead to a continuation with the social partnership agreements / less industrial unrest.

Marking Scheme
5 points at 5 marks each = 25 marks
State: 2 marks each = 5 @ 2 = 10 marks
Explain: 3 marks each = 5 @ 3 = 15 marks

(d) Explain what is meant by the term 'tax harmonisation'.

Tax harmonisation
- Refers to the aim of members of the European Union / other trading blocs
- to move all tax rates to the same rates/align within each member state/country.

Marking Scheme
10 marks graded
(a) Explain by means of a diagram of Circular Flow of Income for open economy the forces which influence the level of aggregate demand.  

(25 marks)

**Marking scheme**

Identifying the 5 'sectors':  5 at 1 mark each  = 5 marks
Identifying the 8 'flows':  8 at 1 mark each  = 8 marks
Identifying correct direction of each flow: 8 directions at 1 mark each  = 8 marks
Reference to Leakages (T, S and M):  = 2 marks
Reference to Injections (G, I and X):  = 2 marks
(b) Given the following information:

<table>
<thead>
<tr>
<th>Period</th>
<th>National Income</th>
<th>Consumption</th>
<th>Investment</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£5,800</td>
<td>£4,800</td>
<td>£1,200</td>
<td>£1,000</td>
<td>£1,200</td>
</tr>
<tr>
<td>2</td>
<td>£5,250</td>
<td>£1,300</td>
<td>£1,200</td>
<td>£1,350</td>
<td></td>
</tr>
</tbody>
</table>

Calculate the following showing all your workings:
(i) The level of National Income in Period 2.
(ii) The Marginal Propensity to Save.
(iii) The Marginal Propensity to Import.
(iv) The size of the multiplier.  

(20 marks)

Answers:

<table>
<thead>
<tr>
<th>Year</th>
<th>Y</th>
<th>C</th>
<th>I</th>
<th>X</th>
<th>M</th>
<th>S = (Y - C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£5,800</td>
<td>£4,800</td>
<td>£1,200</td>
<td>£1,000</td>
<td>£1,200</td>
<td>£1,000</td>
</tr>
<tr>
<td>2</td>
<td>£6,400</td>
<td>£5,250</td>
<td>£1,300</td>
<td>£1,200</td>
<td>£1,350</td>
<td>£1,150</td>
</tr>
<tr>
<td>Change</td>
<td>£600</td>
<td>£450</td>
<td>£100</td>
<td>£200</td>
<td>£150</td>
<td>£150</td>
</tr>
</tbody>
</table>

(i) National Income in Year 2:

\[
Y = C + I + X - M
\]

\[
£5,250 + £1,300 + £1,200 - £1,350 = £6,400
\]

5 figures @ 1 mark each = 5 marks. Signs must be correct

(ii) MPS

\[
£150 = .25
\]

\[
£600
\]

2 figures at 1 mark each + 3 marks for correct answer = 5 marks

(iii) MPM

\[
£150 = .25
\]

\[
£600
\]

2 figures at 1 mark each + 3 marks for correct answer = 5 marks
(iv) The Multiplier

Method 1

Injections = £300. The increase in national income = £600. So the injections have
doubled national income. The multiplier is 2

Reference to injections: 2 marks
Reference to national income doubling: 2 marks
Correct answer for multiplier: 1 mark

Method 2

\[
\text{MPC} = \frac{\text{£450}}{\text{£600}} = 0.75 \quad \text{Multiplier} = \frac{1}{1 - (75\% - 25\%)} = 2
\]

Correct figures inserted for multiplier: 4 marks
Correct answer for multiplier: 1 mark.

(c) Given Gross National Product at Current Market Prices for the years 1990
and 2000, state and explain the relevance of four other pieces of
information in assessing changes in the average standard of living
between 1990 and 2000. (30 marks)

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

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

3. Employment / Unemployment
   If a person is unemployed rising GNP per head will not necessarily mean that this
   person’s average standard of living is rising.
4. Levels of taxation
When considering a person’s standard of living one should take into account rates of income tax and levels of indirect tax within the country. An increase in either of these may result in a drop in a person’s standard of living.

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

6. Measures flow of wealth not welfare
Rising GNP may be accompanied by changing working or living conditions which may cause a loss of welfare e.g. traffic congestion.

7. Hidden social costs attached to increases in GNP
If a firm increases output GNP increases, however a hidden cost may be increased pollution.

8. Distribution of GNP
If increases in GNP make their way into the pockets of a small minority, there may be no improvement in the standard of living of the whole community.

9. Exclusion of important activities from calculation of GNP
The black economy is excluded from the calculation of national income. The work of housewives and much of the work of voluntary activities is also excluded. Such activities are most important to the welfare of its citizens.

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

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

12. Degree of market orientation.
As an economy develops, an increasing amount of activities take place within the market and hence GNP rises. This does not necessarily mean that our standard of living increases.
As more women join the workforce, increased usage of child minding services/facilities is required. While GNP increases this does not necessarily mean that our standard of living is rising.

<table>
<thead>
<tr>
<th>Marking Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points at 8 + 8 + 7 + 7 marks each</td>
</tr>
<tr>
<td>State: 4 points at 3 marks each = 12 marks</td>
</tr>
<tr>
<td>Explain clearly: 4 points at 5 + 5 + 4 + 4 marks each</td>
</tr>
</tbody>
</table>