Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2016

Marking Scheme

Economics

Ordinary Level
Note to teachers and students on the use of published marking schemes

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates’ work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates’ work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

Future Marking Schemes

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates’ work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.
LEAVING CERTIFICATE 2016
MARKING SCHEME

ECONOMICS

ORDINARY LEVEL
Marking Scheme and Support Notes

In considering the marking scheme and the support notes the following points should be noted:

- The support notes presented are not exclusive and further relevant points presented by candidates are rewarded on their merits.
- They are not model answers but a sample of possible responses.
- The support notes in many cases may contain key phrases which must appear in the candidate’s answer in order to merit the assigned marks.
- 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 and mark allocations may therefore vary from year to year.
- Words, expressions or phrases must be correctly used in context and not contradicted and where there is evidence of incorrect use or contradictions the marks may not be awarded.
- As a general rule, if in doubt about the validity of any answer, examiners must consult with their advising examiner before awarding marks.

**INDEX TO QUESTIONS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Topic</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>3 - 7</td>
<td></td>
</tr>
<tr>
<td>Section B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Perfect Competition and Alcohol consumption</td>
<td>8 - 10</td>
</tr>
<tr>
<td>2</td>
<td>Demand, Supply and Banking</td>
<td>11 - 13</td>
</tr>
<tr>
<td>3</td>
<td>Enterprise, National minimum wage and the Web Summit</td>
<td>14 - 16</td>
</tr>
<tr>
<td>4</td>
<td>Census 2016, China and Economic Development</td>
<td>17 - 19</td>
</tr>
<tr>
<td>5</td>
<td>Taxation, USC and Unemployment</td>
<td>20 - 23</td>
</tr>
<tr>
<td>6</td>
<td>Imports, Tourism and MNCs in Ireland</td>
<td>24 - 27</td>
</tr>
<tr>
<td>7</td>
<td>National Income and Economic Growth</td>
<td>28 - 30</td>
</tr>
<tr>
<td>8</td>
<td>National Debt, Metro North and Environmental protection</td>
<td>31 - 34</td>
</tr>
</tbody>
</table>
Section A

1. Complete the following statement:

Land is a factor of production and is defined as anything supplied by **NATURE** which helps in the production of **GOODS** and services. The payment for land is called **RENT**.

First correct response: 8 marks
2nd & 3rd correct response: 4 marks each.

(16 marks)

2. Indicate by means of a tick (✓) the category to which each statement belongs:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Embargo</th>
<th>Quota</th>
<th>Tariff</th>
<th>Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A tax on goods imported into the country</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>A complete ban on the importation of certain goods</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A physical limit placed by the government on the amount of goods that can be imported</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any payment or assistance given by the government to Irish producers of goods or services</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

First correct response: 8 marks
2nd correct response: 4 marks
3rd & 4th correct responses: 2 marks each.

(16 marks)
3. The table below, when completed, illustrates that diminishing marginal utility sets in when 4 units are consumed.

<table>
<thead>
<tr>
<th>Number of units consumed</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total utility in units</td>
<td>15</td>
<td>40</td>
<td>70</td>
<td>85</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Marginal utility in units</td>
<td>15</td>
<td>25</td>
<td>30</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

(a) Complete the blank spaces in the above table.

(b) Explain why diminishing marginal utility sets in.

The marginal utility received from the 4th unit consumed is less than that of the 3rd unit.

(a) Each correct figure: 4 + 4 + 4
(b) Explanation: 4 marks

(16 marks)

4. A firm produces 50 units each week. It receives €50,000 in total from the sale of these 50 units. The firm pays the following costs:
Wages: €5,000; Raw Materials: €25,000; Light & Heat: €3,000; Rent of Premises: €7,000.

Calculate the following, showing your workings:

(a) Total Cost of producing all 50 units: €40,000
(b) Profit made on sales: €10,000
(c) Cost of Producing One Unit: (average cost) €800

(a) Each correct figure: 5 x 2 marks = 10
(b) Each correct figure: 3 x 1 marks = 3
(c) Each correct figure: 3 x 1 marks = 3

(16 marks)
5. Match the economic ideas listed below with the related economist:

<table>
<thead>
<tr>
<th>Economic Idea</th>
<th>Economist</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The Multiplier</td>
<td>1. Karl Marx</td>
</tr>
<tr>
<td>B. Law of Comparative Advantage</td>
<td>2. Adam Smith</td>
</tr>
<tr>
<td>C. Laissez Faire</td>
<td>3. John Maynard Keynes</td>
</tr>
<tr>
<td>D. Worker exploitation in a capitalist system.</td>
<td>4. David Ricardo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic Idea</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economist</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

First correct response: 8 marks
2nd correct response: 4 marks
3rd & 4th correct responses: 2 marks each.

(16 marks)

6. Homelessness is becoming a major social problem in Irish society. Homeless charities report that 70 families per month are being made homeless.

(a) Outline one reason for the increase in homelessness.

1. Growing demand for housing caused by increased population.
2. Reduced supply of social houses due to less building of houses by local authorities.
3. Reduced availability of rental properties.
4. Rising rent costs which are in excess of government rent supplements.
5. Poverty / unemployment leading to inability of some people to pay the high rents for housing in Ireland.
6. High personal debt during the recession making it difficult for some people to meet their mortgage repayments.
7. Central Bank regulation requiring first time buyers to have 20% of the purchase price saved making it more difficult to afford a house.
8. Profit margin on new build / semi-detached houses and apartments is too low to encourage property developers to invest.

(b) Outline one possible economic measure that could be taken by the Irish government to help reduce the numbers becoming homeless in Ireland.

1. Increase availability of social housing / suitable housing acquired by NAMA could be sold to local authorities to provide affordable housing.
2. Provision of modular housing such as is in Dublin at present.
3. Repair and supply boarded-up houses and apartments by local authorities.
4. Increase provision of emergency short term accommodation by local authorities.
5. Increase subsidies for people on low incomes / increase rent allowances to people in receipt of social welfare to make renting more affordable.
6. Reduce taxation on construction / on rental income which may lead to an increase in supply of houses / rental properties.
7. New regulations introduced in December 2015 to protect security of tenure of tenants and regulation with regard to rent increases.

First correct response: 10 marks.
2nd correct response: 7 marks.
7. The Irish government is considering only permitting the sale of cigarettes in plain packaging and banning all forms of branding.

(a) Explain the term **branding**.

The practice of creating a name, symbol or design that identifies and differentiates a product from other similar products.

**Explanation:** 10 marks

(b) Outline one reason why the Irish government is considering introducing this measure.

1. To help reduce the demand for cigarettes particularly by younger people.
2. Makes advertising by tobacco companies more difficult.
3. If consumption declines, then health of the population may improve.
4. Expenditure on health may decrease.

**One reason:** 7 marks.

8. ‘The size of the black economy could be as high as €25 billion a year’

(Source: Irish Small & Medium Enterprises, Irish Independent, Sept. 2015)

(a) Explain the term black economy:

Economic activity which takes place which is not recorded and therefore not included in national income accounts.

**5 marks**

(b) Outline how each of the following is affected by activities in the black economy.

**Irish government:**

1. Taxation: reduction in taxation revenues such as VAT or Income tax revenues / introduction of new taxes or charges to make up for shortfall.
2. Increased government spending on law enforcement.
3. Increased social welfare bill: some people are claiming social welfare and earning an income at the same time.
4. Reduction in provision of state services as the government may not have the income available to provide them.

**Irish businesses:**

1. Reduction in sales / profits as consumers may switch to buying on the black market.
2. Reduction in workforce: firms may have to cut back on their workforce as sales decline.
3. Pressure to reduce prices / improve quality of service in order to compete with lower prices on the black market.

**First correct response:** 8 marks.

**2nd correct response:** 4 marks.
9. The formula for measuring **Income Elasticity of Demand** (YED) is as follows:

\[
\frac{\Delta Q}{\Delta Y} \times \frac{Y_1 + Y_2}{Q_1 + Q_2}
\]

Complete the following table to indicate what each of the above symbols stand for:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\Delta Q)</td>
<td>Change in quantity demanded of the good.</td>
</tr>
<tr>
<td>(\Delta Y)</td>
<td>Change in the consumer’s income.</td>
</tr>
<tr>
<td>(Y_1)</td>
<td>Original consumer’s income.</td>
</tr>
<tr>
<td>(Y_2)</td>
<td>New income of the consumer.</td>
</tr>
<tr>
<td>(Q_1)</td>
<td>Original quantity demanded of the good.</td>
</tr>
<tr>
<td>(Q_2)</td>
<td>New quantity demanded of the good.</td>
</tr>
</tbody>
</table>

First correct response: 8 marks
2\(^{nd}\), 3\(^{rd}\) and 4\(^{th}\) correct responses: 3 marks each.

(17 marks)
Q1  Perfect Competition and Alcohol consumption

The diagram below represents the Long Run Equilibrium of a firm in Perfect Competition.

(a)  (i) Copy the diagram into your answer book.
Complete / write each of the six underlined labels in full.

<table>
<thead>
<tr>
<th>Label</th>
<th>Full Title</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Price</td>
<td>4</td>
</tr>
<tr>
<td>Q</td>
<td>Quantity</td>
<td>4</td>
</tr>
<tr>
<td>AC</td>
<td>Average Cost</td>
<td>4 (2+2)</td>
</tr>
<tr>
<td>MC</td>
<td>Marginal Cost</td>
<td>4 (2+2)</td>
</tr>
<tr>
<td>AR</td>
<td>Average Revenue</td>
<td>4 (2+2)</td>
</tr>
<tr>
<td>MR</td>
<td>Marginal Revenue</td>
<td>4 (2+2)</td>
</tr>
</tbody>
</table>

(ii) Equilibrium occurs at point G on the diagram.
Show on your diagram:
- the price the firm will charge for its output (use label $P_1$).
- the output the firm will produce in equilibrium (use label $Q_1$).

$P_1$ the price the firm will charge for its output
$Q_1$ the output the company will produce

Each correct response: 3 marks each x 2 = 6 marks
(b) One of the characteristics of Perfect Competition is that **perfect knowledge** exists.

(i) Explain the underlined term.
(ii) State **two** other characteristics of perfect competition.
(iii) Write brief notes explaining **each** of these two other characteristics.  

(20 marks)

(i)

**Perfect knowledge**

- In the market every firm has full knowledge as to profits made by the other firms in the industry.
- Consumers are fully aware of the prices being charged for products.

4 marks

(ii) & (iii) **Characteristics:**

*The goods are homogeneous.*

*There are many buyers in the industry.*

*There are many sellers in the industry.*

*Free entry and exit.*

*Firm tries to maximise profits.*

*Elastic supply of factors of production.*

2 x 8 marks each  
State: 2 x 4 marks each.  
Explanation: 2 x 4 marks each.

(c) Alcohol advertising is to be banned in all sports grounds.  
(*Source: Public Health (Alcohol) Bill: December 2015*)

(i) State **one** reason why sporting organisations might **not** favour the above measure.
(ii) State and explain **two** other measures which could be taken to help reduce consumption of alcohol in Ireland.
(iii) Outline **two** other benefits to society of reduced alcohol consumption.  

(25 marks)
(i) State one reason why sporting organisations might not favour the above measure.

**Loss of advertising revenue** for the firms which would have advertised in the grounds.

**Reduction in quality of services:** if the fall in revenue can’t be made up elsewhere it may mean that the organisation may have to reduce services offered to its members.

**Increase in charges / fees:** if the fall in revenue can’t be made up elsewhere then the organisation may have to increase fees for those attending events.

**May have to seek alternative sources of revenues** such as allowing the ground to be used for concerts etc.

5 marks (2+3)

(ii) State and explain two other measures which could be taken to help reduce the consumption of alcohol in Ireland.

**Taxes:** increase taxes such as excise duty/VAT on alcohol which may reduce consumption.

**Regulate availability:** restricting **opening hours** for pubs and off-licences.

**Introduce limits to the amount of alcohol that can be bought in outlets.**

**Age restrictions:** raise the legal age for the consumption of alcohol to 21.

**Sales points:** restrict the number of places selling alcohol e.g. ban the sale of alcohol in petrol stations / restrict the availability of licences.

**Sponsorship:** ban the Drinks’ Industry from sponsoring events.

**Consumer Awareness:** provide advertising campaigns to raise awareness of the risks of excessive alcohol consumption.

**Introduce minimum pricing:** this will ban the sale of alcohol at ‘low’ prices and so help reduce consumption.

**Introduce harsher penalties** for businesses in breach of their licence.

2 x 5 marks (2+3)

(iii) Outline two benefits to society of reduced alcohol consumption.

**Reduced pressure on hospitals / reduction in health spending:** fewer people being admitted to emergency departments.

**Reduction in crime levels:** society bears less social costs.

**Population healthier / wealthier:** citizens will be healthier with less alcohol related illnesses / have more disposable income which they can spend / save.

**Life expectancy:** People may live longer if they reduce their consumption of alcohol/reduction in deaths.

**Increased worker productivity:** if a worker is healthier / happier then s/he may be more productive at work.

**Reduction in absenteeism:** workers may be absent less frequently / less payments on social welfare.

**Reduction in the number of alcohol related deaths** in road traffic accidents.

2 x 5 marks (2+3)
(a) Assume the diagram below represents the market for electric cars in Ireland.

(i) Copy the diagram into your answer book. Clearly label each of the lines marked 1 to 3.

(ii) Show on your diagram:
- equilibrium price (use label \( P_1 \)) / equilibrium quantity (use label \( Q_1 \))

(iii) Outline two possible advantages for Irish society of increased usage of electric cars.

(iv) Outline one measure the Irish government could consider to encourage consumers to switch to electric cars.

(ii) & (ii)

(iii) Outline two possible advantages for Ireland of increased usage of electric cars.

- Reduced emissions / cleaner environment / sustainable development.
- Less waste of scarce resources / reduced reliance on oil / gas / less imports.
- Newer vehicles on roads (Safety).
- Car running costs are reduced as cars can be charged from home. Costs less to maintain as there is no oil to be changed and cost of motor taxation is in the cheapest band €120.

\[
\begin{array}{|c|c|c|}
\hline
\text{Item} & \text{Marks} \\
\hline
1 & \text{Price} & 2 \\
2 & \text{Quantity} & 2 \\
3 & \text{Demand} & 2 \\
equilibrium price & \text{\( P_1 \)} & 2 \\
equilibrium quantity & \text{\( Q_1 \)} & 2 \\
\hline
\end{array}
\]

(ii) & (ii)

(iii) Outline two possible advantages for Ireland of increased usage of electric cars.

- Reduced emissions / cleaner environment / sustainable development.
- Less waste of scarce resources / reduced reliance on oil / gas / less imports.
- Newer vehicles on roads (Safety).
- Car running costs are reduced as cars can be charged from home. Costs less to maintain as there is no oil to be changed and cost of motor taxation is in the cheapest band €120.

\[2 \times 5 \text{ marks (2+3) each}\]
(iv) Outline one measure the Irish government could consider to encourage consumers to switch to electric cars.

**Offer a grant** towards the purchase price of each new electric car purchased. (The government provides a grant of €5,000 to consumers and zero VRT).

**Reduce motor tax** for those who use electric cars. (Cost of motor taxation is in the cheapest band €120)

**Provide more ‘plug-in’ points nationwide** to facilitate the increased use of electric cars.

**Allow electric cars to use bus lanes.**

**Free parking for electric cars.**

**Remove tolls from all Irish roads for all electric cars.**

**Offer incentives to convert from petrol/diesel.**

5 marks (2+3)

(b) The following factors cause either a demand curve or a supply curve to shift to the right or to the left:

- income levels in the economy fall
- the firm’s production technology improves.

In relation to each factor above, answer the following three questions:

(i) state whether the demand curve or supply curve will shift
(ii) state whether the curve you mention will shift to the right or the left
(iii) explain why the curve has shifted in the direction you have stated. (20 marks)

<table>
<thead>
<tr>
<th></th>
<th>Income levels in the economy fall</th>
<th>The firm’s production technology improves</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/C or S/C?</td>
<td>Demand Curve</td>
<td>Supply Curve</td>
</tr>
<tr>
<td>Shift to right or left?</td>
<td>Left</td>
<td>Right</td>
</tr>
<tr>
<td>Explain</td>
<td>Consumers cannot afford to buy the good / service and so demand will fall.</td>
<td>The firm’s ability to produce products improves as their machinery is more efficient and supply will increase.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

(c) Electronic banking refers to the use of computers to carry out banking transactions.

(i) State and explain two functions of commercial banks.

(ii) Outline two economic reasons why a bank may favour electronic banking.

(iii) Outline two possible disadvantages of electronic banking for bank customers. (30 marks)
(i) State and explain two functions of commercial banks.

Savings Facilities.

Lending.

Operate cheque system/current accounts

24 Hour Banking.

Computerised Transfer of Money/Automated Bill Payment.

Foreign Exchange.

2 x 5 marks (2 + 3)

(ii) Outline two economic reasons why a bank may favour electronic banking.

Reduce staff costs: the bank may wish to reduce its staff levels and so reduce its costs.

Increase profits: by reducing costs the banks’ profits may increase and this will benefit its shareholders. Statements etc. can be sent electronically which reduces significantly postage and stationery expenses.

Facilitate increased use of technology by customers: more of its customers are using on-line banking and so banks are adjusting to consumer choice.

Encourages use of on-line transactions: to reduce delays / queuing in the banks.

Increased efficiency: technology is more efficient in providing the service. Banking transactions can be completed without human interaction or communication which can lead to time delays and lower productivity.

Improved customer service. Banking is accessible 24 hours per day 365 days per year from the consumer's home, office, mobile phone anywhere in the world.

2 x 5 marks (2 + 3)

(iii) Outline two possible disadvantages of electronic banking for bank customers.

IT Literacy: Some customers may not have IT skills, computer or internet access to do their banking electronically.

May encourage people to keep cash at home: this increases the risk for people and may lead to an increase in burglaries.

Difficulties at ATMs: some customers may have difficulty remembering their PIN and/or their PIN may be stolen/intercepted at the ATM by fraudsters/different banks have different withdrawal limits etc.

Security issues: some transactions may be open to hacking reducing confidence in the banking system.

Some services are not suitable to be completed electronically. For some services it is necessary to speak to a member of staff for advice.

2 x 5 marks (2+3)
Q3   Enterprise, National Minimum Wage and the Web Summit

(a) An entrepreneur takes a risk in combining land and the other two factors of production in setting up a business.

(i) State and explain the two factors of production, other than enterprise and land.

(ii) Outline two benefits of entrepreneurs for the Irish economy. (24 marks)

(i) State and explain the two factors of production, other than enterprise and land.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Definition</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour</td>
<td>• the human effort involved in the creation of wealth</td>
<td>3 + 3 marks</td>
</tr>
<tr>
<td>Capital</td>
<td>• man-made wealth / machinery used / investment in a business</td>
<td>3 + 3 marks</td>
</tr>
</tbody>
</table>

(ii) Outline two benefits of entrepreneurs for the Irish economy.

Helps create / maintain jobs.

Improves the Balance of Payments.
If the goods produced are exported, the Balance of Payments position for the country will improve.

Encourage further investment / economic growth (GNP).

Innovation: new products.

Help generate tax revenue for the government / reduce current expenditure.

2 x 6 marks (3+3)

(b) The national minimum wage in Ireland was increased from €8.65 to €9.15 in Budget 2016.

(i) Explain the underlined term.

(ii) Outline two aims of a national minimum wage.

(iii) Outline two possible economic disadvantages of an increase in the national minimum wage. (27 marks)

(i) Explain the underlined term.

National Minimum Wage Rate

The lowest wage employers must by law pay their employees.

7 marks (4 + 3)
(ii) **Outline two aims of a national minimum wage.**

**Increase worker’s standard of living**
By providing for a minimum wage workers disposable income increases and their standard of living increases.

**Increase the incentive to work**
It may attract more people into the workforce.

**Introduce an equitable distribution of income/ Reduce problem of poverty**
People on lower levels of pay will now receive a basic minimum level of pay and this helps to re-distribute income within a country.

**Protection of must vulnerable under law**
Workers who may be vulnerable are now fully protected by law from exploitation by unfair employers.

**Reduce unemployment:**
People who are voluntarily unemployed may be encouraged to enter the workforce with the higher wages.

2 x 5 marks (2 + 3)

(iii) **Outline two possible economic disadvantages of an increase in the national minimum wage**

Firms’ costs would increase which would mean they may have to **increase prices** resulting in reduced demand for their output / **lower profits** as a result of higher costs.

**Reduced employment.** Higher wage rates may deter employers from hiring more workers or reduce their existing workforce.

**Quality of service** may be reduced in order to cut costs.

**Risk of closure / greater uncertainty:** if costs rise, demand may fall and the business may not be able to meet costs and the risk of closure increases.

**Reduced competitiveness.** Higher minimum wage increases costs of production which leads to increased selling price in the market place compared to low cost economies.

**Decline in investment.** Inward investment may fall as Ireland may be considered a high cost economy.

2 x 5 marks (2 + 3)
The Web Summit held annually in Dublin over the past three years attracted over 100,000 participants and is re-locating for the next three years to Lisbon, Portugal.

Note: the Web Summit is an annual technology conference with founders of international technology start-ups in attendance.

(i) Outline two advantages to the local economy in Dublin of hosting major conferences such as the Web Summit.

(ii) State two measures that either the Irish government or local government/authorities could take to attract major international conferences to Ireland. (24 marks)

(i) Outline two advantages to the local economy in Dublin of hosting major conferences such as the Web Summit.

Increased demand for hospitality services: there will be an increase in the demand for hotel rooms and this will help hotels improve their profitability. Participants will require meals and this will boost the trade in pubs and restaurants.

Increased short term employment: more people using pubs and restaurants may lead to more people gaining short term employment.

Attract further international conferences: if Dublin is a good venue for this conference it may encourage other agencies to organise conferences in Dublin.

Boost for Irish IT, Technology and start-up companies: the attendance of CEOs of major international companies in Dublin may result in increased demand for the services offered by Irish companies in this sector / increased investment into these companies.

2 x 6 marks (3 + 3)

(ii) State two measures that either the Irish government or local government/authorities could take to attract major international conferences to Ireland.

Hotel accommodation:
The local authority could relax planning laws / rezone land for development to increase the number of rooms available.

Ease transport concerns:
Manage transport to conferences so that people can get there without delays e.g. allow a designated lane for those cars going to the Conference.

Improve broadband availability/Invest in infrastructure:
If high speed broadband was guaranteed in every part of the country, then more conferences might be attracted to Ireland.

Dedicated IDA TEAM /FÁILTE IRELAND that will market Ireland as a destination for conferences internationally, setting out the advantages of Ireland as a location.

Investment in a national convention centre with state of the art facilities to host an event like the Web summit.

2 x 6 marks (3 + 3)
Q4 Census 2016, China and Economic Development

(a) In April 2016 the CSO conducted a count of Ireland’s population at an estimated cost of €55m.

(i) What do the initials CSO stand for?

(ii) What is the official term use for a count of population?

(iii) State one possible expenditure item included in the cost of €55m.

(iv) Explain one use each of the following could make of the data collected:

   Businesses / Irish government.  

   (25 marks)

(i) What do the initials CSO stand for?

   **Central Statistics Office.**  
   
   5 marks

(ii) What is the official term use for a count of population?

   **Census (of Population).**  
   
   5 marks

(iii) State one possible expenditure item included in the cost of €55m.

   1. Wages for enumerators.
   2. Training for enumerators.
   4. Distribution and collection of the forms.  
   
   5 marks

(iv) Explain one use each of the following could make of the data collected:

   Businesses / Irish government.

<table>
<thead>
<tr>
<th>Group</th>
<th>One Use</th>
</tr>
</thead>
</table>
| **Business**  | **Future levels of consumer demand**  
Producers can predict more accurately future demand for their goods and services.  
**Population data**  
Detailed information on the population such as age, gender, marital status, number of children, religion etc. is provided and so businesses have detailed information on their market.  
**Labour market**  
The data can be used by firms when considering future labour requirements. |
| **Irish**     | **Infrastructural requirements**  
It helps the government plan for future infrastructural requirements e.g. schools, houses, roads etc.  
**Provision of essential services**  
It indicates if additional investment in services is required i.e. health, education etc. The information provided will also aid the government in preparing its current budget.  
**Pension / financial planning**  
The government can predict more accurately what provision it should make for pensions, child benefits etc. in the future.  
**Demographic changes**  
It provides information on demographic changes nationally. On a regional basis it helps the government plan for the future needs of the regions.  
**Qualifications of workforce**  
It provides details of the educational qualifications; levels of training attained by the workforce which can help the government plan for future developments in education and training services. |

\[ 2 \times 5 \text{ mark } (3 + 2) \]
(b) China is no longer a centrally planned economy but it is not yet a free enterprise economy. China recently ended its “one-child policy” allowing couples to have two children for the first time since 1979.

(i) Explain the underlined term.

(ii) Outline two advantages of the change in the “one-child policy” for the Chinese economy.

(iii) State and explain two possible economic disadvantages for citizens who live in a centrally planned economy.

(25 marks)

(i) Centrally planned economy:
- Resources are allocated by the state through a central planning mechanism.
- The government intervenes to regulate all economic activity.

5 marks

(ii) Outline two advantages of the change in the one-child policy for the Chinese economy.

Demographics: the structure of the population in China will change and allow for a better age distribution of the population/reduced dependency ratio.

More freedom for people: they will now have the choice to decide whether they want more than one child.

Future workers: with a growth in population the economy will have greater access to future workers/China has the fastest growing ageing population in the world.

Plan for China’s older population: China’s population is getting older and the Government must plan to have sufficient revenues to cater for this older population e.g. provision of health services etc.

Increased demand for goods and services for children. This will improve economic growth / investment.

2 x 5 marks (3 + 2)

(iii) State and explain two possible economic disadvantages for citizens who live in a centrally planned economy.

Less freedom for individuals
The government is involved to such an extent in the economy that an individual’s freedom is restricted e.g. workers may be allocated particular jobs or jobs in particular areas and may be restricted in their ability to change jobs.

Restricted choice for consumers
As not all businesses are motivated by profit consumers may have little say in what is produced and what is available may be quite restricted so choice is reduced.

Social costs may exceed private costs
Citizens may suffer from the social costs of production if economic growth is pursued at all costs e.g. recently pollution was so excessive in Beijing that schools were closed for periods of time.

Lack of independent media
Newspapers and other forms of media are government owned and so the news is very subjective and you may only hear what the government wants you to hear.

2 x 5 marks (3 + 2)
Economic development continues to be a key economic aim for the governments of LDCs.

(i) Explain the underlined term.
(ii) Outline two economic difficulties which citizens of LDCs experience.
(iii) Suggest two possible solutions to the economic difficulties identified. (25 marks)

(i) Economic development:
An increase in the level of income/standard of living/output/GNP per person accompanied by a change in the structure of society.

5 marks: 3 marks + 2 marks

(ii) Outline two economic difficulties which citizens of LDCs experience.
- High population growth rates in LDCs.
- Low life expectancy.
- High foreign debts/lack of capital.
- Over-dependence on one crop in LDCs/Famine
- High percentage of the population engaged in extractive/primary industries.
- Poor infrastructure in LDCs.
- Low per capita incomes in LDCs.
- Poor levels of education/literacy in LDCs.
- Exploitation by large multinationals.

2 x 5 marks (3 + 2)

(iii) Suggest two possible solutions to the economic difficulties identified.
- Re-structure their national debts or cancel their debt
  By re-structuring the debt (or cancelling it) LDCs will have the capital to invest in their own countries.
- Provision of clean water supplies and sanitation facilities
  Investment in these should immediately help reduce deaths and allow people to participate in economic activity.
- Provide aid for infrastructural improvements
  Grant aid for specific projects such as hospitals and school building projects.
- Better terms of trade/Fair Trade
  The WTO could negotiate better terms of trade for LDCs so that revenue from exports increases. By guaranteeing fair trade arrangements with LDCs then income of citizens should increase which will increase standard of living.
- Introduce technology to improve yields/Provision of food for emergencies
  Technology may increase domestic production/help LDCs diversify production/encourage more people to leave the extractive industries for jobs created in other sectors. Emergency supplies of food should help reduce starvation and reduce the number of deaths.

2 x 5 marks (3 + 2)
Q5  Taxation, USC and Unemployment

(a) Irish citizens contribute both direct taxes and indirect taxes to the government.

(i) Explain each of the underlined terms and give one example of each.

(ii) Outline two uses of taxation revenue by the Government.

(iii) The Irish government may consider introducing a sugar tax to address the obesity crisis. Discuss two arguments for or against the introduction of a sugar tax.  

(i) Explain each of the underlined terms and give one example of each category of tax.

<table>
<thead>
<tr>
<th>Direct taxes</th>
<th>Mks</th>
<th>Indirect taxes</th>
<th>Mks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>These are taxes on income or wealth</td>
<td>3</td>
<td>These are taxes on goods / services. Taxes on spending.</td>
</tr>
</tbody>
</table>
| Example     | Income Tax  
Deposit Interest Retention Tax  
Corporation Profits Tax | 2 | Value Added Tax  
Excise Duties  
Vehicle Registration Tax | 2 |

(ii) Outline two uses of taxation revenue by the Government.

To provide revenue for the government
The government requires money to fund the operation of a modern state e.g. defence; policing etc.

To provide essential goods and services/merit goods
The government requires finance to provide services such as health care, education which are essential for citizens.

To help re-distribute income
The government can re-distribute the taxation in the form of social welfare payments to those citizens who require it e.g. the dole; old age pensions; single parent allowances etc.

To develop the infrastructure
The revenue collected can help build roads, airports; hospitals etc.

To help industry
Subsidies; grants and other services can be provided to help industry and encourage enterprise.

Achieve desirable social objectives
To discourage smoking, drinking etc. To decrease pollution/damage to environment.

To help achieve a favourable Balance of Payments
By placing a tax on imports, imports may fall, improving our balance of payments position.

To achieve other government objectives
To boost economic growth, it may cut tax rates. To control inflation, it may increase direct taxes to discourage spending.

2 x 5 marks (2 + 3)
The government may consider introducing a **sugar tax** to address the obesity crisis. Discuss **two** arguments for or against the introduction of a sugar tax.

### Two arguments in favour

**Revenue for state**
This tax would bring in revenue for the government and fund improved state services.

**Reduce consumption of sugary foods**
The tax would increase the price of sugary foods and this may act as a disincentive to purchasing these.

**Help fund health initiatives**
The revenue raised could be used to fund programmes which tackle obesity, particularly among young people.

**Reduce future health costs**
By helping to reduce current consumption there may be less health problems in the future leading to less expenditure on health.

**Healthier population**
Reduced consumption among the population will help to reduce obesity levels thus making the population healthier.

**Opportunities for entrepreneurs**
Opportunities may occur for entrepreneurs to be innovative and supply healthier alternatives.

### OR

### Two arguments against its introduction

**Higher Prices**
Consumers are forced to pay higher prices for some foods.

**Job losses**
If consumption of products decreases, then employees in these industries may lose their jobs.

**A sugar tax is regressive**
It will take proportionately more from lower income people.

2 x 5 marks (2 + 3)
In Budget 2016 the Government reduced the rates of USC.

(i) What do the initials USC stand for?
(ii) Explain one possible economic effect which reductions in the USC rates may have on each of the following:
   - employees;
   - imports into Ireland;
   - the level of employment in Ireland.

(i) **USC: Universal Social Charge**

(ii) Explain one possible economic effect which reductions in the USC rates may have on each of the following:

<table>
<thead>
<tr>
<th>Category</th>
<th>Statement</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Employees              | Higher disposable income   | • Some employees may buy more goods and services and increase their standard of living.  
                           |                            | • Some employees may be able to save more.                                      |
|                        |                            | • Some may use the extra income to reduce their level of debt.               |
| Imports into Ireland   | May increase.              | • With higher disposable income the level of spending should increase.       |
|                        |                            | • Some of this increase in spending will be on imports so imports may increase. |
| Level of employment In | May increase.              | • If spending increases this may boost aggregate demand and so employment may increase.    |
| Ireland                |                            | • As disposable income increases employees may moderate wage demands, costs may fall and this may lead to increased demand for workers. |
|                        |                            | • People who were voluntarily unemployed may now return to work as it is more financially rewarding to do so. |

3 at 5 marks
State: 2 marks. Explain: 3 marks
(c) The unemployment rate is continuing to fall with new figures showing a decline to 9.3% in October 2015, but youth unemployment stands at 19.7%. (Source: Irish Times, November 2015)

(i) Name one method of measuring unemployment in Ireland.

(ii) State and explain two possible economic advantages for Ireland of this fall in unemployment.

(iii) Suggest one measure the Irish government could take to reduce youth unemployment. (25 marks)

(i) Name one method of measuring unemployment in Ireland.

   Live Register or Quarterly National Household Survey. 6 marks

(ii) State and explain two possible economic advantages for Ireland of this fall in unemployment.

   Increase in standard of living / reduced poverty.
   Increase in government tax revenues.
   Reduction in social welfare.
   Economic growth.
   Increase in investment.
   Expansion by firms.
   Improved outlook for rural towns.

   2 x 7 marks (4+3)

(iii) Suggest one measure the Irish government could take to reduce youth unemployment.

   Provide more opportunities for education / training.
   Subsidise work placements/internships.
   Lower PRSI contributions.
   More school based vocational training / introduce entrepreneurship courses in school.
   Taxation / social welfare policy / minimum wage rates.
   Abolition / reduction of third level fees.

   5 marks (3+2)
Q6 Imports, Tourism and MNCs in Ireland

(a) Irish people attending the Euro 2016 (European soccer championships) in France is an example of an invisible import for Ireland.

(i) Distinguish between a visible import and an invisible import.

(ii) State and explain two reasons why imports are important for the Irish economy. (20 marks)

(i) Distinguish between the terms a visible import and an invisible import.

Visible import

This is the purchase of a foreign good by a person in Ireland / money leaves Ireland.

5 marks

Invisible import

This is the purchase of a foreign service by a person in Ireland / money leaves Ireland.

5 marks

(ii) State and explain two reasons why imports are important for the Irish economy.

More choice for consumers / Higher standard of living
Consumers have a larger selection of goods and services available to them e.g. exotic fruits; foreign holidays etc.

Raw materials unavailable in Ireland
Certain raw materials are not available in Ireland and must be imported e.g. oil. Our climate is unsuitable for the production of certain crops i.e. oranges.

Employment in the distribution sector
The importation of goods requires people to help in their importation, processing and distribution. Imports create jobs in those sectors.

Tax revenue for the state
If the government places tariffs on some imports, then this will generate revenue for the state.

Small domestic market
Due to the small Irish market certain products cannot be produced economically and so must be imported e.g. cars.

2 x 5 marks (2 + 3)
(b) ‘More than 8 million tourists are expected to visit Ireland in 2016’.
(Source: Tourism Ireland, Dec. 2015)

(i) State and explain **two** economic advantages of this development for the Irish economy.

(ii) Outline **two** measures which firms in the Irish Tourism Industry could take to ensure that the number of tourists visiting Ireland continues to increase.

(iii) Outline **one** reason why Ireland is considered a popular tourist destination. (25 marks)

(i) State and explain **two** economic advantages of this development for the Irish economy.

**Increased employment**
More jobs will be created in the hotel / restaurant and catering industry.

**Increased income / GNP**
Tourists spend income in Ireland and this increases the circular flow of income.

**Benefits to businesses within the tourism sector**
Hotel, restaurants and pubs will face a less uncertain future and demand for their services will increase.

**Tax revenues**
Increased employment will boost direct tax revenues and increased spending will boost indirect tax revenues.

**International reputation**
Ireland’s profile as a holiday destination is improved and more tourists may be attracted to Ireland.

**Spin-off industries benefit**
Suppliers to the hospitality and tourism sector will experience increased demand, leading to increased sales and profits.

2 x 5 marks (2 + 3)

(ii) Outline **two** measures which firms in the Irish Tourism Industry could take to ensure that the number of tourists visiting Ireland continues to increase.

**Offer competitive air fares / extend the number of routes**
This will make it cheaper for people to visit Ireland and may allow greater access for potential tourists.

**Advertising & Promotion**
Increase spending on international advertising so as to attract more people to Ireland. Target specific markets such as those interested in golf, fishing, walking etc.

**More competitive prices for accommodation and services/Value for money**
Special prices could be offered to tourists for accommodation, food, transport etc. and this may entice people to visit e.g. reduced prices for tourist menus in restaurants.

**Offer special promotions**
Money-off vouchers / coupons in foreign magazines / newspapers, which tourists could use if they visit Ireland.

2 x 5 marks (2 + 3)
(iii) Outline one reason why Ireland is considered a popular tourist destination

**Fall in the value of the euro**
The value of the euro compared to the US dollar and pound Sterling has fallen in the past year and this has made it cheaper to visit Ireland.

**Price / availability of air transport**
The availability of low cost air fares to Ireland has attracted tourists. Both Aer Lingus and Ryanair have increased the number of routes they operate and this has encouraged more people to visit Ireland.

**Targeted advertising**
Advertising by Tourism Ireland emphasising niche markets is attracting more tourists e.g. the Wild Atlantic Way.

**Ireland has a wide range of attractions and activities to offer**
Ireland offers a wide range of activities such as golfing, music festivals, horse racing, hill walking, surfing etc. which attract many people with different interests.

5 marks (2 + 3)

(e) Apple, an example of an MNC operating in Ireland, has decided to build a new data centre in Athenry, Co. Galway.

(i) What do the initials MNC mean?

(ii) Name one other MNC located in Ireland.

(iii) State one reason why Apple may have located in Ireland.

(iv) Discuss two possible economic advantages to a local community, other than direct employment, of an MNC locating its operations there (30 marks)

(i) What do the initials MNC mean?

**Multinational Company.**

6 marks

(ii) Name one other MNC located in Ireland.

**Google / Facebook / Pfizer / Coca Cola / Intel / Dell / IBM / Microsoft / Ryanair / Glanbia**

6 marks

(iii) State one reason why Apple may have located in Ireland.

**Availability of a skilled workforce.**
**Availability of land/planning permission.**
**Access to good infrastructure.**
**Availability of state incentives.**
**Low rates of taxation.**
**Access to large European market.**

6 marks (3 + 3)
(iv) Discuss two possible economic advantages to a local community, other than direct employment, of an MNC locating its operations there.

Indirect employment.
Economic activity will increase.
May attract other foreign investment.
Communities may become more vibrant.

2 x 6 marks (3 + 3)
Q7 National Income and Economic Growth

(a) One method for calculating National Income, is the expenditure method.
   (i) Explain the underlined term.
   (ii) Name the two other methods used to calculate national income.
   (iii) State and explain two possible uses of national income statistics for a country.  (25 marks)

(i) Explain the underlined term.

   Income earned by the permanent residents of a country from current economic activity in one year.

   5 marks

(ii) Name the two other methods used to calculate national income.

   Income and Output methods

   2 x 5 marks

(iii) State and explain two possible uses of national income statistics for a country.

   Changes in the level of economic growth
   The national income statistics will inform us about the rate of economic growth within the country from one year to the next.

   Changes in standard of living
   If national income is rising, then we may deduce that the standard of living within the country is rising.

   Changes to employment levels
   An increase in GNP results in an increase in demand which should translate into more jobs.

   International comparisons
   Ireland’s national income statistics allow comparisons to be made with other countries as to the rate of economic growth.

   Distribution of income
   An examination of the statistics will give us a general indication of the distribution of incomes between different sectors in the country e.g. agricultural sector etc.

   Contribution of government
   The statistics will tell us the overall contribution made by the government to the national income within the country.

   2 x 5 marks (3+2)
(b) Given National Income \( (Y) \) as: \[ Y = C + I + G + X - M \]
where
\[ C = \text{€2,000m} \quad I = \text{€700m} \quad G = \text{€500} \quad X = \text{€200m} \quad M = \text{€150m} \]

(i) State what each of the letters / symbols in the formula above represents.

(ii) Calculate, using the figures provided, the level of National Income.

\[ Y = C + I + G + X - M \]
\[ \text{€2,000m} + \text{€700m} + \text{€500m} + \text{€200m} - \text{€150m} = \text{€3,250m} \]

(c) “The EU has predicted that Ireland’s GDP will grow by 4.5% in 2016.” (Source: Irish Times Nov. 2015)

(i) What do the letters EU and GDP stand for?

(ii) State and explain two possible economic advantages of the above development for the Irish economy.

(iii) Outline two possible costs of economic growth.

(i) European Union and Gross Domestic Product

(ii) State and explain two possible economic advantages of the above development for the Irish economy.

Increased employment
A rise in GDP will lead to increased demand with more labour being demanded to produce this output.

Improved government finances
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.

Improved Balance of Payments
If the extra GDP results from increased output and if some of this output is exported then our balance of payments position improves.

Improved standard of living
Higher GDP results in increased income/wealth in the economy allowing us to buy more goods and services / a reduction in poverty.

Effects on Emigration
If jobs opportunities exist then people who had planned to emigrate may stay here and more immigrants may be attracted to the economy thereby increasing the demand for goods and services.

Investment opportunities.
Rising GDP indicates a growing economy and this may attract investment.

\[ 2 \times 5 \text{ marks} \ (3 + 2) \]
(iii) Outline **two** possible costs of economic growth.

**Pressure on housing market**
The rise in GDP may increase spending power and this may cause further increases in house prices.

**Demand for wage increases.**
Workers may demand pay increases to compensate for pay reductions in recent years e.g. this is currently the case in the transport sector.

**Revised expectations by citizens**
During a period of economic growth expectations may change and may conflict. Some citizens may wish to see more investment in infrastructure or improved state services while others may prefer to see a reduction in taxation.

**Increased demand for imports**
An increase in GDP increases incomes and spending power and demand for imports may rise worsening the balance of payments position.

**Inflationary pressures.**
With the rise in the level of economic activity the level of demand inflation will rise.

**Inequitable distribution of income / wealth**
Rising GDP may increase the wealth of the wealthy disproportionately while poverty may continue to exist in Ireland e.g. homelessness; lack of state services.

2 x 5 marks (3 + 2)
Q8 National Debt, Metro North and Environmental protection

(a) Reducing Ireland’s national debt is one of the Irish government’s economic aims.
   (i) Explain the underlined term.
   (ii) State and explain two economic advantages of reducing Ireland’s national debt.
   (iii) State and explain two other economic aims of the Irish government.  

(i) Explain the underlined term.

   National Debt: the total amount of government borrowing which is outstanding.

   5 marks

(ii) State and explain two economic advantages of reducing Ireland’s national debt.

   Lower annual interest repayments
   A falling national debt implies interest payments annually also fall.

   Opportunity cost: increased funds available for the government
   With less being repaid on national debt, more funds are available to the government for other uses.

   Reduced pressure on taxpayers
   With a reduction in national debt there is less pressure on present/future taxpayers for higher taxes to fund repayment of the national debt.

   Circular flow of income
   With less money leaving the country a greater amount remains here thereby adding to the circular flow of national income. This should boost economic activity.

   Increased provision of public services
   Due to the decrease in the national debt the government may not have to cut back spending on public services, resulting in increased provision of some services e.g. the health service; education service.

   Improved international credit-rating.
   The fact that Ireland is seen to have a decreasing national debt (and adhering to EU/IMF rules) means that our credit-rating by various agencies may improve.

   Improved confidence in the economy
   Citizens and businesses may gain confidence in the economy and increase their spending. This may further increase economic growth.

   2 x 5 marks (3 + 2)
(iii) State and explain two other economic aims of the Irish government.

Achieve full employment.

Sustainable government finances / reduce borrowing.

Achieve economic growth.

Broaden the tax base / lower income tax.

Provide efficient state services.

Infrastructural development / broadband access.

Promote balanced regional development.

Boost exports / improve competitiveness / attract investment / up-skill the workforce.

Sustainable economic development.

2 x 5 marks (3 + 2)

(b) ‘Metro North, a high-speed rail from Dublin City centre to Dublin Airport and Swords is to go ahead as part of the Government’s plans to improve the country’s infrastructure at a cost of €2.4 billion’. (Source: Irish Independent, September 2015)

(i) Explain the underlined term.

(ii) State and explain one possible economic advantage and one possible economic disadvantage of the construction of Metro North for the Irish economy.

(iii) State one other example of infrastructure which should be invested in currently and state one reason for your choice. (26 marks)

(i) Infrastructure:

- goods/services which are essential for the smooth running of an economy
- goods/services which industry requires to function properly
- capital equipment used to supply publicly available services

6 marks
(ii) State and explain one possible economic advantage and one possible economic disadvantage of the construction of Metro North to the Irish economy.

<table>
<thead>
<tr>
<th>Economic advantages</th>
<th>Economic disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less traffic congestion/reduced commuting time With the new metro there may be a reduction in cars on the roads thereby easing traffic congestion.</td>
<td>Increase in land / property prices Property prices adjacent to the metro route may increase, causing difficulty for those who may wish to buy property.</td>
</tr>
<tr>
<td>Reduced pollution / Environmental protection With reduced cars, pollution levels (noise and emissions) will fall thereby reducing damage to the environment.</td>
<td>Financial cost of the project Taxes may have to increase to fund the project.</td>
</tr>
<tr>
<td>Shorter travelling times: less stress/accidents/ improved public transport service The commuting time between Dublin Airport / Swords and intervening routes to the city centre will be reduced. With less delays and hassle, stress for travellers will be reduced.</td>
<td>Opportunity cost of the project Some citizens may prefer that the funds used for the project could be put to alternative uses e.g. alleviating homelessness etc.</td>
</tr>
<tr>
<td>Enhanced local environment With less car traffic, the new metro may allow local communities redevelop and enhance their physical environment.</td>
<td>Disruption during construction As with all such projects there may be disruption to the economic, social and commercial life.</td>
</tr>
<tr>
<td>Reduced oil consumption More people may avail of the Metro reducing private car use and thereby reducing the consumption of oil.</td>
<td>Loss of income for taxi / bus operators With more people using the Metro less people will be using taxis and buses and this means a loss of income, leading to possible job losses.</td>
</tr>
<tr>
<td>Increased employment Jobs will be created during the construction of the Metro.</td>
<td>Population density may not be adequate to justify the cost.</td>
</tr>
</tbody>
</table>

6 marks (3 + 3) 6 marks (3 + 3)

(iii) State one other example of infrastructure which should be invested in currently and state one reason for your choice.

<table>
<thead>
<tr>
<th>Example</th>
<th>Reason for choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband</td>
<td>Access is not uniform throughout the country and so the government need to invest so that all citizens have access to high speed broadband.</td>
</tr>
<tr>
<td>Hospitals</td>
<td>As there is an overcrowding problem in hospitals with many patients on trolleys the government should build more hospitals or extend existing ones to cater for the increased numbers using them.</td>
</tr>
<tr>
<td>Schools</td>
<td>With the increase in population there will be greater need for primary and secondary education so the government should build more schools.</td>
</tr>
<tr>
<td>Public Transport</td>
<td>To reduce emissions the government should invest in better public transport, particularly in rural areas.</td>
</tr>
</tbody>
</table>

4 marks 4 marks

Suggest one measure which any three of the following could take to protect the environment.
Consumers / Businesses / Local communities / Irish government. (24 marks)

Consumers

Shop local: buy food from local producers which may reduce transport use.
Re-cycle / compost home waste will help maintain a clean and healthy environment.
Don’t litter / pollute keeping the environment clean.
Use public transport to help reduce emissions or walk rather than drive.
Switch to solar energy / energy efficient bulbs reducing the use of fossil fuels.
Buy electric cars which will help reduce emissions.
Turn off lights, equipment when not in use: less waste of scarce resources.

Businesses

Sponsorship for local communities to help plant trees / shrubs etc. in their local areas.
Facilitate re-cycling initiatives: consumers can return old products / re-cycling.
Reduce energy use / switch to solar (renewable) energy will help reduce the use of fossil fuels.
Introduce charges for plastic bottles and refund when the bottle is returned.
Reduce packaging will help reduce waste and save scarce resources.

Local communities

Tidy Towns Competitions will encourage citizens to keep their local communities clean
Organise community re-cycling centres which may encourage local communities to reduce waste.
Maintain / develop public amenity areas for use by the community so that the environment is enhanced.
Facilitate local / farmer markets so people can buy locally and this reduces the need to import foodstuffs or travel long distances.

Irish government

Education campaigns helps to increase awareness of the benefits of a clean/healthy environment.
Increase taxes on those practices which impact negatively on the environment i.e. plastic bottle tax; private car tax; congestion tax on cars in Dublin City.
Provide / subsidise public transport which would encourage its use and so help reduce emissions.
Grants for solar energy use / home insulation which helps reduce waste.

3 x 8 marks (4 + 4)
Blank Page