National Income

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Economics

Pack 4 • Exam Prep • 6th Year

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Short Questions

1)

Study the table below and calculate **(i)** and **(ii)**, showing all your workings.

Year	National Income	Consumption	Investment	Exports	Imports
1	€24,000	€15,000	€6,000	€10,000	€7,000
2	€34,000	€22,000	€8,000	€16,000	€12,000

(i) The Marginal Propensity to Save (MPS).

Answer: ________

(ii) The size of the Multiplier.

Answer: ________

(17 marks)

2)

Outline **three** factors currently affecting the rate of savings in the Irish economy.

(i)______________________________

(ii)______________________________

(iii)______________________________

(17 marks)

3)

Outline **two** measures the Irish Government could take to increase consumer spending in the economy.

Answer 1:

____

____

Answer 2

____

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(16 marks)

4)

It is estimated that in the Irish economy:
MPS = 0.25, MPM = 0.3, MPT = 0.2. Calculate the value of the Multiplier in the Irish economy.
Explain the economic meaning of the Multiplier figure. (See Formulae and Tables Booklet p.29)
Show your workings.

Workings

Answer: ______________________

Explanation: ______________________

____

(17 marks)

5)

Given that Gross National Product at Current Market Prices is €180 million; Price Subsidies €4 million; Depreciation €15 million; Indirect Taxes €25million; complete the following calculations.
Show your workings

(i) **Gross National Product at Factor Cost**

______________________ = €______________

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

______________________ = €______________

(17 marks)

6)

From the table below, calculate **(i)** and **(ii)**, showing all your workings.

Period	National Income	Consumption	Investment	Exports	Imports
1	€4,200	€3,750	€400	€600	€550
2	€4,600	€4,050	€500	€700	€650

(i) The Marginal Propensity to Consume.

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(ii) The size of the Multiplier.

____

____

(17 marks)

7)

Explain why GNP rather than GDP (both at Market Prices) is generally regarded as a better measure of average standard of living in Ireland.

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(17 marks)

LONG QUESTIONS

2011

(a) (i) Define the following terms:

- Gross Domestic Product at Current Market Prices;
- Gross National Product at Factor Cost.

(ii) Explain **two** reasons why **GDP** in Ireland at present is larger than **GNP**.

(30)

(b) (i) Explain what is meant by the term 'Multiplier'.

(ii) It has been estimated that in the Irish economy:
MPT = 0.22, MPM = 0.30, MPS 0.28.
Calculate the value of the Multiplier in the Irish economy.

(iii) Outline briefly how taxes affect the value of the Multiplier.

(25)

(c) '*The Irish Government predicts that the rate of economic growth in 2011 will be 1.75%'.*
(The National Recovery Plan 2011-2014)

Discuss the economic effects of an increase in the rate of economic growth on the Irish economy.

(20)

[75 marks]

2010

(a) Given that Gross National Product at Current Market Prices is €200m, price subsidies €5m, depreciation €12m and indirect taxes €30m.
Calculate the value of **each** of the following: **Show all your workings.**

(i) Gross National Product at Factor Cost;
(ii) Net National Product at Factor Cost/National Income.

(20 marks)

(b) Explain the economic effect which **each** of the following could have on the level of GNP at Market Prices:

(i) a **reduction** in the general level of VAT;
(ii) a **reduction** in the subsidies paid to farmers.

(20 marks)

(c) (i) Outline the main uses of National Income Statistics.
(ii) State and explain **four** reasons why care should be taken when using National Income Statistics as a measure of economic performance of a country.

(35 marks)

[75 marks]

2009

(a) The following table shows the level of National Income its Consumption, Investment and Export components at the end of periods 1 and 2, and the level of Imports at the end of period 1. (For the purpose of this question you may ignore the Government sector).

	National Income	Consumption	Investment	Exports	Imports
Period 1	€40,000	€30,000	€15,000	€15,000	€20,000
Period 2	€50,000	€39,000	€18,000	€21,000	**?**

Calculate the following, showing all your workings:

(i) Level of imports at the end of period 2;
(ii) Level of savings at the end of period 2;
(iii) Marginal Propensity to Consume (MPC);
(iv) Size of the Multiplier.

(20 marks)

(b) **'**Ireland is described as a small open economy and this affects the government's ability to influence the level of aggregate demand in the country'.
Explain this statement, using the Circular Flow of Income diagram to support your answer.

(30 marks)

(c) Outline the limitations of using Gross National Product at Current Market Prices when comparing the average standard of living between two different years.

(25 marks)
[75 marks]

2008

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

(30 marks)

(b) The **Circular Flow of Income** for an open economy describes the flows that influence the level of National Income.

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

(20 marks)

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

Discuss the economic consequences of a slower rate of economic growth for Ireland.

(25 marks)
[75 marks]

2007

(a) The main components of National Income are: Consumption, Investment, Government Expenditure, Exports, Imports.

(i) Show the equation which links all of these components with the level of National Income in the economy.
(ii) Explain what determines/influences the size of **each** of these components of National Income.

(25 marks)

(b) The table below shows the level of National Income, Consumption, Investment, Exports and Imports at the end of Year 1 and Year 2.
(For the purpose of this question you may ignore the government sector.)

Year	National Income	Consumption	Investment	Exports	Imports
1	€10,000	€8,600	€1,000	€1,200	€800
2	€11,200	€9,500	€1,300		€1,100

Calculate the following, showing all your workings:

(i) The level of Exports in Year 2;
(ii) The Marginal Propensity to Import;
(iii) The Marginal Propensity to Save;
(iv) The size of the Multiplier. Explain the economic meaning of this multiplier figure.

(25 marks)

(c) Less developed countries (LDCs) are primarily concerned with achieving **economic development** while developed countries are concerned with achieving **economic growth**.

(i) Distinguish between the two underlined terms.
(ii) Outline **THREE** characteristics which indicate that a country is a LDC.

(25 marks)
[75 marks]

2006

(a) **(i)** Explain what is meant by the term **'National Income'**.
(ii) In Ireland at present, would you expect **GNP** to be greater than, equal to, or less than, **GDP**? Explain your answer.

(20 marks)

(b) **(i)** Explain what is meant by the term **'the multiplier'**.
(ii) State the formula by which the multiplier is measured in an open economy.
(iii) Explain the variable elements in the formula.
(iv) It has been estimated that in the Irish economy:
MPM = 0.4, MPT = 0.24, MPS = 0.26.
Calculate the value of the multiplier in the Irish Economy. Show your workings.

(30 marks)

(c) Gross National Product at Current Market Prices for the year 2005 in Ireland was approximately 45% higher than the figure for the year 2000.

State and explain the relevance of **FOUR** other pieces of economic information which you would use to assess whether or not the average standard of living had also risen by approximately 45% between 2000 and 2005.

(25 marks)
[75 marks]

2005

(a) (i) Explain, with the aid of a diagram of **Circular Flow of Income** for an open economy, the main elements of aggregate demand.

(ii) Outline the expected effects which an injection of government spending into the economy, could have in each of the following cases:
- a closed economy at less than full employment;
- an open economy at full employment.

(30 marks)

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

(i) The size of the Multiplier;

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

(20 marks)

(c) "GNP growth of 5% is forecast for 2005". (Report of the Central Bank and Financial Services Authority of Ireland-Autumn 2004).
Discuss the economic consequences (positive **and** negative) of economic growth on the Irish economy.

(25 marks)
[75marks]

2004

(a) Explain the following terms which are commonly used in estimating the National Income statistics of a country:
(i) Incomes-in-kind;
(ii) Transfer Payments;
(iii) Net Factor Income from the Rest of the World.

(20 marks)

(b) The table below shows the levels of National Income, Consumption, Investment, Exports and Imports at the end of Year 1 and Year 2.
(For the purpose of this question you may ignore the government sector.)

Year	National Income	Consumption	Investment	Exports	Imports
1	€5,000	€4,300	€500	€600	€400
2	€5,600	€4,750	€650	€750	

Calculate the following, showing all your workings:

(i) The level of Imports in Year 2.
(ii) The Marginal Propensity to Import.
(iii) The Marginal Propensity to Save.
(iv) The size of the Multiplier. Explain the economic meaning of this figure.

(25 marks)

(c) National Income statistics provide important information, but are subject to certain limitations.
(i) Explain **THREE** reasons why it is useful to have these statistics.
(ii) Explain **THREE** limitations as to the use of these statistics.

(30 marks)

[75 marks]

2003

(a) Explain the following terms and show the relationship which exists between both:
(i) Gross Domestic Product at Factor Cost
(ii) Gross National Product at Market prices. (20 marks)

(b) Outline the effects which each of the following could have on the level of GNP at Market Prices.

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

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

Explain your answer in each case. (20 marks)

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

2001

(a) Explain by means of a diagram of **Circular Flow of Income** for an open economy the forces which influence the level of aggregate demand. (25 marks)

(b) The following table shows the levels of National Income, Consumption, Investment, Exports and Imports at the end of Period 1 and Period 2. For the purpose of this question you may ignore the government sector.

Period	**National Income**	**Consumption**	**Investment**	**Exports**	**Imports**
1	£5,800	£4,800	£1,200	£1,000	£1,200
2		£5,250	£1,300	£1,200	£1,350

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)

(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)

[75 marks]

Answers (Short Questions)

1)

6. Study the table below and calculate **(i)** and **(ii)**, showing all your workings.

Year	National Income	Consumption	Investment	Exports	Imports
1	€24,000	€15,000	€6,000	€10,000	€7,000
2	€34,000	€22,000	€8,000	€16,000	€12,000

(i)

The Marginal Propensity to Save (MPS)	**MPC**
Savings = Y – C	MPS = 1 – MPC
Year 1: €24,000 – €15,000 = € 9,000 Year 2: €34,000 – €22,000 = €12,000	↑ in C: € 7,000 ↑ in Y: = €10,000
MPS = $\frac{€3,000}{€10,000}$ = 0.3 or 30%	MPC = $\frac{€7,000}{€10,000}$ = 0.7 or 70% MPS = **1 – 0.7 = 0.3**

9 marks

(ii) The size of the Multiplier.

Increase in imports: €12,000 – €7,000 = €5,000

MPM = $\frac{€5,000}{€10,000}$ = 0.5 or 50%

Method 1	**Method 2**
	MPC = 1 – MPS = 1 – 0.3 = 0.7
$\frac{1}{MPS + MPM}$	$\frac{1}{1 - (MPC - MPM)}$
$\frac{1}{0.3 + 0.5}$	$\frac{1}{1 - (0.7 - 0.5)}$
$\frac{1}{0.8}$	$\frac{1}{0.8}$
1.25	1.25

8 marks

2)

Outline **three** factors **currently** affecting the rate of savings in the Irish economy.

Confidence in economy
People are concerned about the future of the economy which is affecting consumer confidence.
As a result people are tending to postpone purchasing and save instead. Consumers are spending less and are deferring spending until later. This results in forced savings.

Security of savings
Due to the current economic climate people are less inclined towards risky investments and prefer the security of state backed savings. Due to the on-going banking crisis consumers are seeking greater security for their savings e.g. An Post's 'National Solidarity Bond'.

(Real) **Rate of interest**
Savers will seek an interest rate greater than the current rate of inflation so as to maintain purchasing power. If the products available produce reasonable returns / time deposits, then people are more likely to use them as a form of saving.

Income levels
For some people income levels have fallen and so they are able to save less.

Rate of DIRT
The government increased the rate of DIRT in the December budget. This may discourage some people from saving.

3 points: 6 + 6 + 5 marks.

3)

Outline **two** measures the Irish Government could take to increase consumer spending in the economy.

(a) **Decrease indirect taxes e.g. VAT**
This will help reduce prices and so encourage consumers to spend.

(b) **Provide incentives to consumers to spend**
The introduction of the car scrappage scheme encouraged consumers to change their cars and so demand has increased.
Extending home insulation grants may encourage house owners to spend on insulation / further improvements on their houses.

(c) **Decrease direct taxes e.g. income taxes / increase the minimum wage**
This would increase consumers' disposable incomes and so encourage spending.

(d) **Generate confidence in the economy**
The government, by pursuing appropriate economic policies, may give consumers and producers confidence in the economy and so encourage both to increase demand.

(e) **Facilitate lending by the financial institutions**
By assisting the financial institutions the government may encourage them to give credit which will lead to an increased demand by borrowers/consumers.

(f) **Capital investment programme**: government could increase capital expenditure in order to stimulate aggregate demand and incomes e.g. complete the NDP.

2 points at 8 marks each. State: 4 marks. Explain: 4 marks.

4)

It is estimated that in the Irish economy: MPS = 0.25, MPM = 0.3, MPT = 0.2. Calculate the value of the Multiplier in the Irish economy. Explain the economic meaning of the Multiplier figure. **Show your workings.**

$$\frac{\mathbf{1}}{\mathbf{0.25 + 0.3 + 0.2}} = 1.33$$

5 marks: 1 mark for each item.

This means that for any given injection into the economy national income will increase by 1.33 times

12 marks

5)

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

(i) <u>Gross National Product at Factor Cost</u>

GNP @ Market Prices + Price Subsidies – Indirect Taxes = GNP @ Factor Cost
€180 million + €4 million – €25 million = €159 million

(ii) <u>Net National Product at Factor Cost/National Income</u>

GNP @ Factor Cost – Depreciation = NNP @ FC
€159 million* – €15 million = €144 million

17 marks graded.

6)

(i) MPC = 8 marks

(i) MPC = $\dfrac{300\ \mathbf{(2m)}}{400\ \mathbf{(2m)}}$ = 75% = .75 (**4 marks** for correct answer)

(ii) Multiplier = 9 marks

Method 1: $\dfrac{1^*}{1^* - (.75^* - .25^*)} = \boxed{2}$

4 figs. @ 1 mark each. Correct answer: 5 marks

Method 2: $\dfrac{1^*}{.25 + 25^*} = \boxed{2}$

2 figs. @ 1 mark each. MPS = 2 marks. Correct answer: 5 marks

Method 3: Injections = €200. National Income ↑ by €400
So the multiplier = $\boxed{2}$

Injections: 2 marks / ↑ in Nat. Income: 2 marks. / Correct answer: 5 marks

7)

GNP rather than GDP is generally regarded as a better measure of average standard of living in Ireland because it takes account of:

Incomes earned by Irish factors of production abroad and returned to Ireland less those incomes earned by foreign factors of production in Ireland and sent out of Ireland.

Or

Net / factor from the rest of the world and whether it is positive or negative.

Or

Net repatriation of profits / incomes and
The interest repayments on the foreign element of the National debt.

17 marks

ANSWERS (LONG QUESTIONS)

2011

(a) (i) Define the following terms:

- Gross Domestic Product at Current Market Prices;
- Gross National Product at Factor Cost.

(ii) Explain **two** reasons why **GDP** in Ireland at present is larger than **GNP**. *(30)*

(i)

Gross Domestic Product at Current Market Prices:

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

7 marks

Gross National Product at Factor Cost:

The total output produced (value of goods & services) by **Irish owned** factors of production **in Ireland and elsewhere valued at payments to the factors of production.**

7 marks

(ii) Explain **two** reasons why **GDP** in Ireland at present is larger than **GNP**

1. Repatriation of profits by foreign multinationals in Ireland.
2. Repayment of interest on the foreign element of our National Debt.
3. Remittances of immigrants in Ireland sent abroad.

16 marks

(b) (i) Explain what is meant by the term ‘Multiplier’.
(ii) It has been estimated that in the Irish economy:
MPT = 0.22, MPM = 0.30, MPS 0.28.
Calculate the value of the Multiplier in the Irish economy.
(iii) Outline briefly how taxes affect the value of the Multiplier. *(25)*

(i) The multiplier:

The multiplier shows the relationship between an (initial) injection into the circular flow of income and the eventual total increase in national income resulting from the injection.

8 marks

(ii) Calculate the multiplier

Method 1	Method 2
$\frac{1}{MPS + MPT + MPM}$ $\frac{1}{0.28 + 0.22 + 0.3}$ $\frac{1}{0.8}$ 1.25	MPC = 1 – MPS = 1 – 0.28 = 0.72 $\frac{1}{1 - (MPC - MPT - MPM)}$ $\frac{1}{1 - (0.72 - 0.22 - 0.3)}$ $\frac{1}{0.8}$ 1.25
8 marks	**8 marks**

(iii) Outline briefly how taxes affect the value of the Multiplier

1. Taxes decrease spending within the economy / taxes are a leakage from the circular flow of national income.
2. When spending decreases less economic activity is generated within the economy.
3. The value/the magnitude of the multiplier decreases.

9 marks

(c) ‘*The Irish Government predicts that the rate of economic growth in 2011 will be 1.75%*’.
(The National Recovery Plan 2011-2014)

Discuss the **economic effects** of an increase in the rate of economic growth on the Irish economy. *(20)*

Positive economic effects	**Negative economic effects**
Increased employment Economic growth will lead to increased demand with more labour being demanded to produce this.	**Inflationary pressures** With a rise in the level of economic activity the level of demand- pull inflation will rise.
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.	**Use of scarce resources** Economic growth results in an increased demand for scarce resources e.g. oil. The increased demand may involve damage to the environment.
Effects on Balance of Payments If the increase in the rate of economic growth is export led then the balance of payments position improves.	**Increased demand for imports** Economic growth increases incomes and spending power and demand for imports may rise, worsening the balance of payments position.
Improved standard of living Economic growth will result in increased wealth in the economy allowing us to buy more goods and services / a reduction in poverty / better state services.	**Revised expectations by citizens** With economic growth citizens may alter their expectations of government and expect more services from the state e.g. revised taxes; growth in incomes; wage demands etc.
Effects on migration If jobs opportunities exist then people who had planned to emigrate may stay here and more immigrants may be attracted to the economy.	**Uneven distribution of wealth** If the increase in wealth is not fairly distributed then the gap between rich and poor may widen.
Investment opportunities Economic growth indicates a growing economy and this may attract additional investment.	

4 points x 5 marks each

2010

(a) Given that Gross National Product at Current Market Prices is €200m, price subsidies €5m, depreciation €12m and indirect taxes €30m.
Calculate the value of **each** of the following: **Show all your workings.**
(i) Gross National Product at Factor Cost;
(ii) Net National Product at Factor Cost/National Income. (20 marks)

(i) Gross National Product at Factor Cost – 10 marks

GNP @ Market Prices + Price Subsidies – Indirect Taxes = GNP @ Factor Cost

€200 million	+	€5 million	–	€30 million	=	**€175 million***
↓		↓		↓		↓
2 marks		**2 marks**		**2 marks**		**4 marks**

(ii) Net National Product at Factor Cost/National Income – 10 marks

GNP @ Factor Cost – Depreciation = NNP @ FC

€175 million*	–	€12 million	=	**€163 million**
↓		↓		↓
3 marks		**3 marks**		**4 marks**

(b) Explain the economic effect which **each** of the following could have on the level of GNP at Market Prices:
(i) a **reduction** in the general level of VAT;
(ii) a **reduction** in the subsidies paid to farmers. (20 marks)

	Reduction in general level of VAT		**Reduction in subsidies paid to farmers**	
Effect on GNP at Market Prices	**Will decrease**	**4 marks**	**Will increase**	**4 marks**
Explanation	The reduction in VAT will **decrease the prices for goods & services which consumers must pay in the market place**	**6 marks**	The reduction in subsidies paid to farmers will **increase GNP at market prices as prices for agricultural products will rise in the market place**	**6 marks**
		10 mks		**10 mks**

or

The Long run

	Reduction in general level of VAT		Reduction in subsidies to paid to farmers	
Effect on GNP at Market Prices	**Will increase**	**4 marks**	**Will decrease**	**4 marks**
Explanation	**With lower prices consumers may buy more goods and services, aggregate demand increases and so GNP increases.**	**6 marks**	**Prices will rise and so demand for their commodities will decrease resulting in a reduction in consumption and so GNP will decrease.**	**6 marks**
		10 mks		**10 mks**

(c) (i) Outline the main uses of National Income Statistics.
(ii) State and explain **four** reasons why care should be taken when using National Income Statistics as a measure of economic performance of a country. (35 marks)

(i) Outline the main uses of National Income Statistics.

1. Indication of alterations in our standard of living
Any change in our national income figures will indicate the level of economic growth, or otherwise, within the country from one year to the next, and give a general indication of changes to the standard of living, if any. Used by trade unions to justify wage demands.

2. Means of comparing the standard of living in different countries.
We can use the national income statistics to compare the standard of living in our country with that of other countries.

3. Assists the government in formulating economic policy.
Governments have a greater influence on the development and growth of the economy. To effectively plan for this governments' need information about our economy such as that provided by the National Income statistics.

4. Evaluate economic policy
To assess changes to the economy and economic changes in the various sectors, and to provide a benchmark against which progress can be monitored, it is useful to have national statistics.

5. EU Budget Contributions / Benefits
The wealth revealed in our national income statistics will determine the contribution, if any, which Ireland must make to the EU budget.
The figure will also be used within the EU to determine those countries which require financial aid from the EU and the amount of that aid.

3 points at 5 marks each.
State: 2 marks. Explain: 3 marks.

(ii) **Four** reasons why care should be taken when using National Income Statistics as a measure of economic performance of a country.

- **Population changes**
  If national income grows at a slower rate than population, then national income per head decreases and the average standard of living will fall. Hence population changes must be considered with changes in national income when assessing a country's economic performance.

- **Inflation/deflation**
  An increase in prices will increase national income but standard of living may fall. So, changes in national income must be compared with changes in prices to determine the impact on standard of living / economic performance.

- **Employment / Unemployment**
  If a person is unemployed rising national income will not necessarily mean that this person's average standard of living is rising.

- **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.

- **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.

- **Measures flow of wealth not welfare**
  Rising GNP may be accompanied by changing working/living conditions which may cause a loss of welfare e.g. more traffic congestion and so a person's standard of living may fall.

- **Hidden social costs attached to increases in national income.**
  If a firm increases output national income increases. However, a hidden cost may be increased pollution etc.

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

- **Exclusion of important activities from calculation of national income.**
  The black economy is excluded from the calculation of national income.
  The work of housewives & voluntary activities is also excluded. Such activities are important to the welfare of its citizens.

- **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.

- **Government services at cost price**.
  Government services are included at cost while private services are included at selling price. A country where the government provides many services will record a lower GDP / national income.

4 points at 5 marks each.
State: 2 marks. Explain: 3 marks.

2009

(a) The following table shows the level of National Income, its Consumption, Investment and Export components at the end of periods 1 and 2, and the level of Imports at the end of period 1. (For the purpose of this question you may ignore the government sector.)

	National Income	Consumption	Investment	Exports	Imports
Period 1	€40,000	€30,000	€15,000	€15,000	€20,000
Period 2	€50,000	€39,000	€18,000	€21,000	**?**

Calculate the following, showing all your workings:

(i) The level of imports at the end of period 2;
(ii) The level of savings at the end of period 2;
(iii) The Marginal Propensity to Consume;
(iv) The size of the Multiplier.

(i) Imports at the end of period 2

GNP = C + I + X – M
50,000 = 39,000 + 18,000 + 21,000 – M
50,000 – 39,000 – 18,000 – 21,000 = – M
50,000 – 78,000 = – M
– 28,000 = – M
M = 28,000

(ii) Savings at the end of period 2

GNP – C = S
50,000 – 39,000 = S
S = 11,000

(iii) Marginal Propensity to Consume

$$MPC = \frac{\Delta C}{\Delta GNP}$$

$$MPC = \frac{9{,}000}{10{,}000}$$

$$MPC = 0.9$$

(iv) Size of the Multiplier

$$\frac{1}{1-(\mathbf{MPC}-\mathbf{MPM})}$$

$$\frac{1}{1-(0.9-0.8)}$$

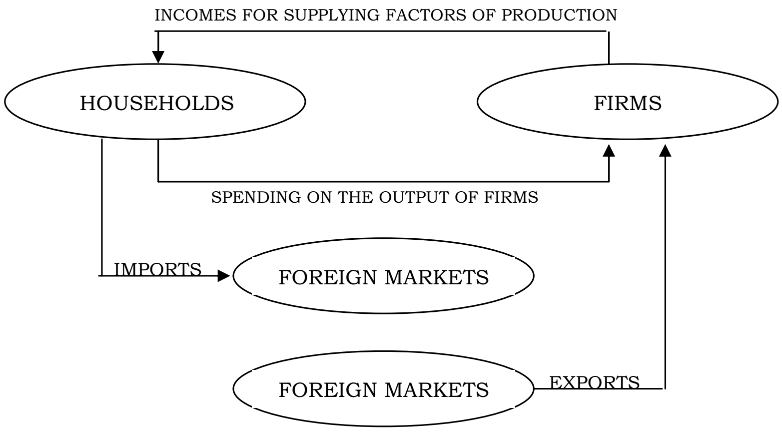
$$\frac{1}{1-0.1} = \frac{1}{0.9} = 1.11$$

$$MPM = \frac{\Delta M}{\Delta GNP}$$

$$MPM = \frac{8{,}000}{10{,}000}$$

$$MPM = 0.8$$

(b) 'Ireland is described as a small open economy and this affects the government's ability to influence the level of aggregate demand in the country'.
Explain this statement using the Circular Flow of Income to support your answer.



Circular Flow Diagram – 14 marks graded.

1. As an open economy, Ireland is heavily dependent on imports and exports to achieve economic growth.

   Imports are a leakage.

2. If the government injects money (through C, I or G) into the circular flow, some of it will leave the economy due to the MPM and reduce the circular flow of income. Thus aggregate demand will not grow by the anticipated amount / aggregate demand will fall.

   Exports are an injection.

3. The government has little direct control/influence over exports except through offering tax incentives to exporters. If demand for Irish exports increases then this will increase the circular flow of income. This will lead to extra income in Ireland and an increase in aggregate demand.

4. The ability of the government to influence aggregate demand is hindered by the extent of foreign trade, particularly imports. If imports exceed exports aggregate demand will fall. If exports exceed imports aggregate demand will increase.

Explanation: 16 marks graded.

(c) Outline the limitations of Gross National Product at Current Market Prices when comparing the average standard of living between two different years.

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

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

- **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.

- **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.

- **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.

- **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.

- **Hidden social costs attached to increases in GNP**
  If a firm increases output GNP increases. However, a hidden cost may be increased pollution etc.

- **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 general community.

- **Exclusion of important activities from calculation of GNP**
  The black economy is excluded from the calculation of national income. The work of housewives & voluntary activities is also excluded. Such activities are important to the welfare of its citizens.

- **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.

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

5 points @ 5 marks each graded

2008

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

National Income

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

Gross Domestic Product at Current Market Prices

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

or

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

1st correct answer at 12 marks graded.
2nd correct answer at 6 marks graded.

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

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

Relationship correctly explained 12 marks graded.

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

(i)

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

3 leakages and 3 injections at 12 marks graded.

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

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

8 marks graded.

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

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

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

2007

(a) Components of National Income are: Consumption; Investment; Government Expenditure; Exports, Imports.

(i) Show the equation which links all these components with the level of National Income in the economy.

$$Y = C + I + G + X - M$$ **5 marks**

(ii) Explain what determines/influences the size of **each** of these components of National Income. (25 marks)

Consumption: 2 at 3 marks each graded.

- **Levels of incomes (irrespective of source):** as income rises, the level of spending tends to rise.
- **MPC**: the higher the MPC, the higher will be the level of spending.
- **Availability of credit**: as credit becomes more easily available the level of spending will rise.
- **Rate of interest**:
  Currently interest rates are increasing and with borrowing falling, spending will fall.
- **Rates of (income) taxation**: if these increase, disposable income falls and spending will fall.

Investment: 2 at 2 marks each graded.

- **Rate of Interest / MEC:**
  as interest rates rise, borrowing becomes more expensive and investment tends to fall.
- **Expectations of business people**:
  are they optimistic about the future? Does government policy favour risk taking; are the levels of taxation conducive to risk-taking etc.

Government Expenditure: 1 at 2 marks graded.

- Primarily depends on the **political decisions of the government** and the type of fiscal policy being pursued by the state.

Exports: 2 at 2 marks each graded.

- **Income levels in our export markets**: if high then the demand for Irish exports may increase.
- **Competitiveness of Irish exports**: levels of domestic inflation v. international rates.
  If our goods are competitive on export markets then demand may increase.
- **Value of the euro** in relation to other currencies e.g. the US dollar / Pound Sterling.

Imports: 2 at 2 marks each graded.

- **Levels of incomes (irrespective of source):**
  as income rises, the level of spending on imports tends to rise.
- **MPM**: the higher the MPM the higher will be the demand for imports.
- **Value of the euro** in relation to other currencies e.g. the US dollar / Pound Sterling.

(b) The table shows the level of National Income, Consumption, Investment; Exports, and Imports at the end of Year 1 & Year 2.

Year	National Income	Consumption	Investment	Exports	Imports
1	€10,000	€8,600	€1,000	€1,200	€800
2	€11,200	€9,500	€1,300		€1,100

Calculate the following, showing all your workings:
(i) The level of Exports in Year 2;
(ii) The Marginal Propensity to Import;
(iii) The Marginal Propensity to Save;
(iv) The size of the multiplier. Explain the economic meaning of this multiplier figure. (25 marks)

(i) Level of Exports in Period 2 – **5 marks**

$$Y = C + I + X - M$$
$$\textbf{€11,200} = \textbf{€9,500} + \textbf{€1,300} + \textbf{X} - \textbf{€1,100} = \boxed{\textbf{€1,500}}$$

(ii) MPM – **5 marks**

$$\boxed{\frac{\textbf{€300}}{\textbf{€1,200}} = \textbf{0.25}}$$

(iii) MPS – **5 marks**

$\frac{\textbf{€300}}{\textbf{€1,200}} = \textbf{0.25}$	**MPS= 1 – MPC** **1 – 0.75** **0.25**

(iv) The Multiplier – **5 marks**

Method 1

Injections = €600. The increase in national income = €1,200. So the injections have doubled national income. The multiplier is $\boxed{2}$

Method 2

$$\text{MPC} = \frac{€900}{€1,200} = 0.75 \qquad \text{Multiplier} = \frac{1}{1 - (75\% - 25\%)} = \boxed{\mathbf{2}}$$

Method 3

$$\frac{\mathbf{1}}{\textbf{MPS + MPM}} \qquad \frac{\mathbf{1}}{\mathbf{0.25 + 0.25}} \qquad \boxed{\mathbf{2}}$$

The economic meaning of **this figure**:

This figure [2] means that for any given injection into the economy, national income will increase by twice the original injection.

5 marks.

(c) Less developed countries (LDCs) are primarily concerned with achieving **economic development** while developed countries are concerned with **economic growth**.

(i) Distinguish between the two underlined terms.

Economic Development	Economic Growth
An increase in the level of income / standard of living / output / GNP per person in a country, accompanied by a change in the structure of society.	An increase in GNP per head, without any changes in the structure of society.

13 marks graded.

(ii) Outline **THREE** characteristics which indicate that a country is a LDC.

High rate of population growth.
Rates are very high resulting in economic problems which the government finds hard to resolve.

Famine.
Too frequently famine occurs in LDCs resulting in disease; deaths at early age; high medical costs.

Foreign Debts.
These are very high. Their repayment uses up government revenue and their repayments can cripple the economy.

Uneven distribution of wealth.
In some LDCs, a minority may control a large part of the country's wealth resulting in widespread poverty.

Over-dependence on one crop.
Some LDCs are over-dependent on one crop. The country may be subject to crop failure and/or a wide variation in export prices .

High percentage of the population engaged in extractive/primary industries.
This results in not enough workers in secondary & tertiary sectors, resulting in low standards of living.

Poor Terms of Trade.
LDCs may suffer from low export prices and high import prices and hence the gains from trade are reduced.

Poor living conditions / Inadequate infrastructure.
A large percentage of the population live in shanty towns with no water and poor sanitation.

Lack of capital.
LDCs may lack the capital which is essential for economic development & employment generation.

Low per capita income for the majority of the population.
This results in a poor standard of living and a consequent low demand for goods and services.

Poor levels of education/literacy.
This will act as an impediment to economic development, resulting in high unemployment.

Political corruption.
Some LDCs spend a lot on bureaucratic administration / military spending which can result in civil unrest.

Exploitation by multinationals of LDCs / Economic Dualism.
This may take the form of low wage rates; lack of care for the environment; control over key exports etc.

3 points at 4 marks each graded.

2006

(a) (i) Explain what is meant by the term '**National Income'.**
(ii) In Ireland at present, would you expect **GNP** to be greater than ,equal to, or less than, **GDP**? Explain your answer. (20 marks)

(i) National Income

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

9 marks graded

(ii) In Ireland at present, would you expect **GNP** to be greater than, equal to, or less than, **GDP**? Explain your answer

- GNP **is less than** GDP at the moment, because
- **Net Factor Income** from the Rest of the World **is negative.** This is due to:
- the repatriation of profits by companies resident in Ireland
- the repayments on the foreign element of our National debt.
- the remittances of immigrants in Ireland sent abroad

11 marks graded

(b) (i) Explain what is meant by the term 'the multiplier'.
(ii) State the formula by which the multiplier is measured in an open economy.
(iii) Explain the variable elements in the formula.
(iv) It has been estimated that in the Irish economy: MPM = 0.4, MPT = 0.24, MPS = 0.26. Calculate the value of the multiplier in the Irish economy. Show your workings. (30 marks)

(i) Explain what is meant by the term 'the multiplier'

The multiplier shows the precise relationship between an initial injection into the circular flow of income and the eventual total increase in national income resulting from the injection.

8 marks graded

(ii) State the formula by which the multiplier is measured in an open economy.

Formula : $\frac{1}{MPS+MPM}$ or $\frac{1}{1 - (MPC-MPM)}$. **4 marks**

(iii) Explain the variable elements in the formula.

MPC – Marginal Propensity to Consume

- This is the proportion of each additional unit of income which is spent.

MPM – Marginal Propensity to Import

- This is the proportion of each additional unit of income which is spent in imports.

MPS – Marginal Propensity to Save

- This is the proportion of each additional unit of income which is saved.

2 terms at 4 marks each graded = 8 marks

(iv) It has been estimated that in the Irish economy: MPM = 0.4, MPT = 0.24, MPS = 0.26.
Calculate the value of the multiplier in the Irish economy. Show your workings.

$$MPC = 1 - MPS \quad = \quad 1 - 0.26 = 0.74$$

$$\frac{1}{1 - (MPC - MPM - MPT)} = \frac{1}{1 - (0.74 - 0.4 - 0.24)} = \frac{1}{0.9} = \mathbf{1.1}$$

or

$$\frac{\mathbf{1}}{\mathbf{MPS + MPM + MPT}} \qquad \frac{\mathbf{1}}{\mathbf{0.26 + 0.4 + 0.24}} \qquad \frac{\mathbf{1}}{\mathbf{0.9}} \qquad \underline{\mathbf{1.11}}$$

10 marks graded

(c) Gross National Product at Current Market Prices of the year 2005 in Ireland was approximately 45% higher that the figure for the year 2000.
State and explain the relevance of FOUR other pieces of economic information which you would use to assess whether or not the average standard of living has also risen by approximately 45% between 2000 and 2005. (25 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. So 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 etc.

8. Distribution of GNP
General living standards depend on its distribution. 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.

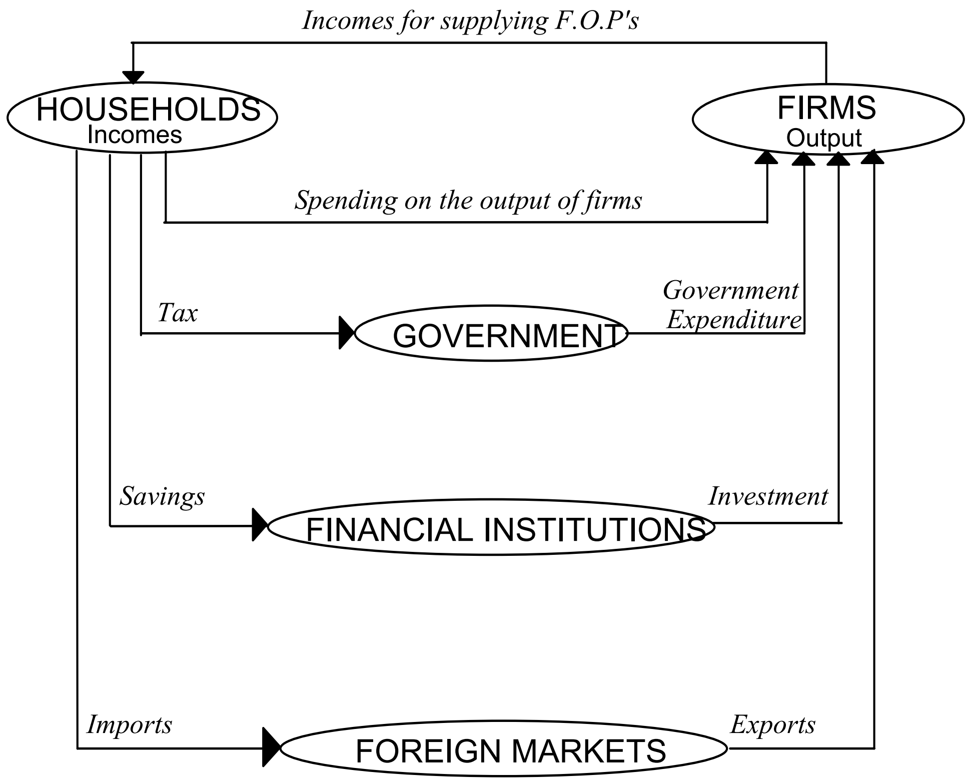
10. Nature of the goods produced
A country which spends a small amount on military equipment and a large amount on health, education etc. will have a better standard of living that one where the reverse is the case i.e. much of its wealth on armaments.

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.

Marking Scheme: 4 points at 6 + 6 + 6 + 7 marks graded.

2005

(a) (i) Explain, with the aid of a diagram of **Circular Flow of Income** for an open economy, the main elements of aggregate demand.



Marks: Diagram – 12 marks graded
Explanation of the main elements of aggregate demand: 10 marks graded.

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

- a closed economy at less than full employment;
- an open economy at full employment. *(30 marks)*

A closed economy at less than full employment	An open economy at full employment
1. Increase in level of aggregate demand	1. Increase in level of aggregate demand
2. Increase in the level of **employment**	2. Increase in the level of **imports**.
3. Increase in the level of savings within the economy	3. Increase in the level of savings within the economy
4. Increase in the level of inflation.	4. Increase in the level of inflation.
8 marks graded	

(b) It has been estimated that in an economy, MPM = 0.2, MPT = 0.1 and MPC = 0.9.
Calculate the following, showing all your workings:
(i) The size of the multiplier.

$$\frac{1}{1 - (\text{MPC-MPM-MPT})} = \frac{1}{1 - (0.9 - 0.2 - 0.1)} = \frac{1}{0.4} = \boxed{\mathbf{2.5}}$$

<u>or</u>

$$\frac{1}{\text{MPS + MPM + MPT}} = \frac{1}{0.1 + 0.2 + 0.1} = \frac{1}{0.4} = \boxed{\mathbf{2.5}}$$

10 marks graded

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

Injection x Multiplier = Overall Increase in National Income
€500m x 2.5 = €1,250m

10 marks graded

(c) "GNP growth of 5% is forecast for 2005".
(Report of the Central Bank & Financial Services Authority of Ireland – Autumn 2004).
Discuss the economic consequences (positive **and** negative) of economic growth on the Irish economy.(25)

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

Marking: 5 points at 5 marks graded.

2004

(a) Explain the following terms which are commonly used in estimating the National Income statistics of a country.
(i) Incomes-in-kind;
(ii) Transfer Payments;
(iii) Net Factor Income from the Rest of the World. *(20 marks)*

(i) Incomes-in-kind: ***6 marks***

- **Income received in a non-monetary form**
- **Payment made in the form of goods or services**

(ii) Transfer Payments: ***6 marks***

- **Payments received for which no factor of production has been supplied /**
- **Income which people receive for which they did not supply goods/services.**

(iii) Net Factor Income from the Rest of the World: ***8 marks***

- **This is the difference between incomes earned by foreign factors of production in Ireland and send abroad and income earned by Irish factors of production abroad and returned to Ireland.**

(b) The table below shows the levels of National Income, Consumption, Investment, Exports and Imports at the end of Year 1 and Year 2.
(For the purpose of this question you may ignore the government sector.)

Year	National Income	Consumption	Investment	Exports	Imports
1	€5,000	€4,300	€500	€600	€400
2	€5,600	€4,750	€650	€750	

Calculate the following, showing all your workings:

(i) The level of Imports in Year 2.
(ii) The Marginal Propensity to Import.
(iii) The Marginal Propensity to Save.
(iv) The size of the Multiplier. Explain the economic meaning of this figure.
(25 marks)

(i) Level of Imports in Period 2:

Y	**=**	**C**	**+**	**I**	**+**	**X**	**–**	**M**		
€5,600	**=**	**€4,750**	**+**	**€650**	**+**	**€750**	**-**	M	**=**	$\boxed{\text{€550}}$

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

(ii) MPM

€150 = 0.25 **€600**	2 figures at 2 marks each + 1 mark for correct answer = ***5 marks***

(iii) MPS

€150 = 0.25 **€600**	**MPS= 1 – MPC** **1 – 0.75** **0.25**	2 figures at 2 marks each + 1 mark 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 $\boxed{2}$

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

Method 2

MPC = $\frac{€450}{€600}$ = 0.75 **Multiplier = $\frac{1}{1 - (75\% - 25\%)} = \boxed{2}$**

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

The economic meaning of this figure:

This figure [2] means that for any given injection into the economy, national income will increase by twice the original injection. ***5 marks***

(c) National Income statistics provide important information, but are subject to certain limitations.
(i) Explain **THREE** reasons why it is useful to have these statistics.
(ii) Explain **THREE** limitations as to the use of these statistics. *(30 marks)*

(i) Reasons why it is useful to have these National Income statistics

3 points x 5 marks graded.

1. Indication of alterations in our standard of living
Any change in our GNP figures will indicate the level of economic growth within the country from one year to the next, and give a general indication of changes to our standard of living – if any.

2. Means of comparing the standard of living in different countries.
We can use the GNP statistics to compare the standard of living in our country with that of other countries.

3. Assist the government in formulating economic policy.
Governments now play a greater influence in the development and growth of the economy. To effectively plan for this governments need information about our economy such as that provided by the National Income statistics.

4. Evaluate economic policy
To assess changes to the economy and economic changes in the various sectors, and to provide a benchmark for against which progress can be monitored – it is useful to have these statistics.

5. EU Budget Contributions / Benefits
The wealth revealed in our national income statistics will determine the contribution (if any) which Ireland must make to the EU budget.
The figure will also be used within the EU to determine those countries which require aid from the EU and the amount of that aid.

(ii) THREE limitations as to the use of National Income these statistics

3 points x 5 marks graded.

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.
So 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 / living conditions which may cause a loss of welfare.

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
General living standards depend on its distribution. 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 spend 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. International comparisons
When comparing the GNP of one country with that of another the following precautions are necessary:
- **Conversion of currencies to a common denominator**
- **The extent to which a country is self-sufficient**
- **The needs of the people in each country e.g. in countries with hot climates less will be spend on heating.**

2003

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

(i) Gross Domestic Product at Factor Cost

(ii) Gross National Product at Market prices. (20 marks)

Gross Domestic Product at Factor Cost: ***7 marks graded***

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

Or

20

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

Gross National Product at Market Prices: ***7 marks graded***

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

Or

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

Relationship: ***6 marks graded***

G.D.P. at Factor Cost

+/- Net Factor Income from Rest of the World

= G.N. P. at Factor Cost

+ Indirect taxes :

- Subsidies : .

= G.N.P. at Market Prices

(b) Outline the effects which each of the following could have on the level of GNP at Market Prices.

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

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

Explain your answer in each case. (20 marks)

Short-term:

	RISE in general level of VAT	REDUCTION in subsidies to first-time house buyers
Effect on GNP at Market Prices	Will increase	Will increase
Explanation	The increase in VAT will increase the prices for goods & services which consumers must pay in the market place	The decrease in first-time house buyers subsidies will increase GNP at market prices as house prices will rise in the market place
	10 marks graded	***10 marks graded***

or

Long-term:

	RISE in general level of VAT	REDUCTION in subsidies to first-time house buyers
Effect on GNP at Market Prices	Will decrease	Will decrease
Explanation	The increase in VAT will increase the prices of goods & services which consumers must pay in the market place. Thus, demand falls and output falls. Real output falls by more than the increase in the price level.	The decrease in first-time house buyers' subsidies will decrease GNP at market prices as house prices will rise in the market place. Producers lose this subsidy and so the output of houses falls. Decline in real activity exceeds the elimination of the subsidy element.
	10 marks graded	***10 marks graded***

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

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

5 points at 7 marks each graded.
Minimum: of 2 positive/negative consequences required.

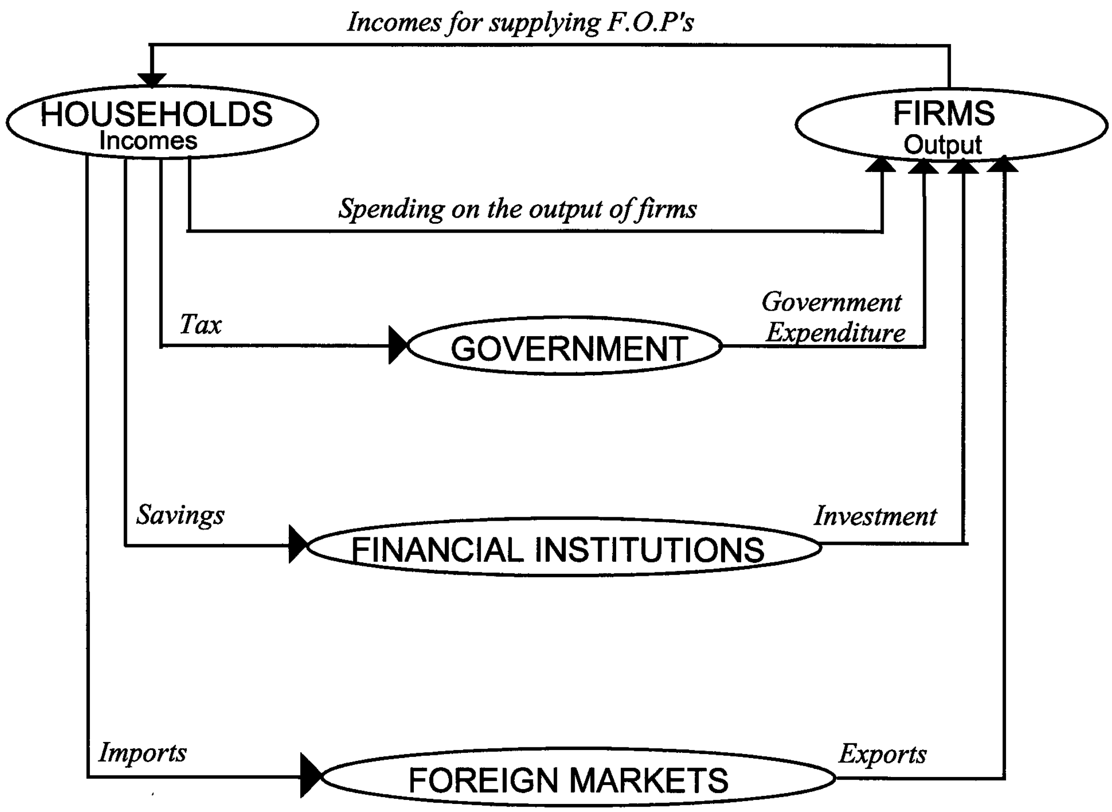
2001

(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:

Period	National Income	Consumption	Investment	Exports	Imports
1	£5,800	£4,800	£1,200	£1,000	£1,200
2		£5,250	£1,300	£1,200	£1,350

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:

Year	Y	C	I	X	M	S= (Y – C)
1	£5,800	£4,800	£1,200	£1,000	£1,200	£1,000
2	£6,400	£5,250	£1,300	£1,200	£1,350	£1,150
Change	£600	£450	£100	£200	£150	£150

(i) National Income in Year 2:

$$Y = C + I + X - M$$
$$£5,250 + £1,300 + £1,200 - £1,350 = \boxed{£6,400}$$

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

(ii) MPS

$$\frac{£150}{£600} = .25$$

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

(iii) MPM

$$\frac{£150}{£600} = .25$$

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 $\boxed{2}$

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

Method 2

MPC = $\frac{£450}{£600}$ = .75 Multiplier = $\frac{1}{1 - (75\% - 25\%)}$ = $\boxed{2}$

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

Marking Scheme
4 points at 8 + 8 + 7 + 7 marks each
State: 4 points at 3 marks each = 12 marks
Explain clearly: 4 points at 5 + 5 + 4 + 4 marks each