The SSIP is supported by
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## LEARNER NOTES

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</tbody>
</table>
TOPIC 1: CIRCULAR FLOW

Learner Note: Make sure you know the circular flow model and how to use it to work out the value of the output produced by the economy at factor cost. Also remember that when Leakages = Injections, the economy will be in equilibrium. You will now learn how changes in the injections cause a change in the equilibrium level of output.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 12 minutes  
(Taken from DoE Nov 2009)

1.1 Study the table below on the calculation of GDP and answer the questions that follow.

<table>
<thead>
<tr>
<th>CALCULATION OF GDP ACCORDING TO THE INCOME METHOD (2007 figures)</th>
<th>R bn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation of employees</td>
<td>843</td>
</tr>
<tr>
<td>Net operating surplus</td>
<td>644</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td>255</td>
</tr>
<tr>
<td><strong>Gross value added @ A</strong></td>
<td><strong>1 742</strong></td>
</tr>
<tr>
<td>Taxes on production</td>
<td>35</td>
</tr>
<tr>
<td>Subsidies on production</td>
<td>6</td>
</tr>
<tr>
<td><strong>Gross value added @ basic prices</strong></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>__________ on products</td>
<td>231</td>
</tr>
<tr>
<td>Subsidies on products</td>
<td>6</td>
</tr>
<tr>
<td><strong>Gross domestic product @ market prices</strong></td>
<td><strong>1 996</strong></td>
</tr>
<tr>
<td>Primary income from rest of world</td>
<td>46</td>
</tr>
<tr>
<td>Primary income to rest of world</td>
<td>108</td>
</tr>
<tr>
<td><strong>GNI @ market prices</strong></td>
<td><strong>1 934</strong></td>
</tr>
</tbody>
</table>

[Source: SARB Quarterly Bulletin, September 2008]

1.1.1 Differentiate between GDP and GNP.  
*Define both GDP and GNP*  
(4)

1.1.2 Which alternative term is used for GDP in the national accounts?  
*Alternative name*  
(2)

1.1.3 Provide labels for A and C.  
(4)

1.1.4 Calculate the gross value added at basic prices (letter B).  
(4)

1.1.5 Which component contributed most to the Gross Domestic Product?  
*Use data in table*  
(3)

1.1.6 Give a reason why the GNP figures in South Africa are generally lower than the GDP figures.  
(3) [20]
QUESTION 2: 20 minutes  
An open economy circular flow model illustrates the economic interaction between the four participants. Describe this interaction in detail with the aid of a diagram, which includes injections and withdrawals.  
(This question is only part of an essay question that counts 50)

QUESTION 3: 13 minutes  
3.1 Explain leakages and injections. 
(Remember always to give an example)  
[8]

3.2 List THREE methods by which the gross domestic product can be calculated.  
(3 x 2) (6)

3.3 Discuss the role of households (consumers) in the economic circular flow model.  
(4 x 2) (8)

QUESTION 4: 6 minutes  
4.1 Study the table below and answer the questions that follow.

<table>
<thead>
<tr>
<th>NATIONAL INCOME AND PRODUCTION ACCOUNTS OF SOUTH AFRICA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Compensation of employees</td>
</tr>
<tr>
<td>Net operating surplus</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
</tr>
<tr>
<td>Gross value added at factor cost</td>
</tr>
<tr>
<td>Plus other taxes on production</td>
</tr>
<tr>
<td>Less other subsidies on production</td>
</tr>
<tr>
<td>Gross value added at basic prices</td>
</tr>
<tr>
<td>Taxes on products</td>
</tr>
<tr>
<td>Less subsidies on products</td>
</tr>
<tr>
<td>Gross domestic product at market prices</td>
</tr>
</tbody>
</table>

[Source: SARB, Quarterly Bulletin, March 2010]

4.1.1 Explain the item subsidies on products.  
(3)

4.1.2 Explain the item consumption of fixed capital.  
(3)

4.1.3 Calculate the compensation of employees as a percentage of GDP at market prices. Show ALL calculations.  
(4)

[10]
TOPIC 2: THE MULTIPLIER

QUESTION 1: 12 minutes  
(Taken from DoE Exemplar 2008)

1.1 Study the graph below that depicts a simplified two-sector economy (where \( E = C + I \)) and answer the questions that follow.

1.1.1 Name the TWO sectors involved in deriving the macro-economic multiplier. 
\textit{(Name means to give only the terms and not discuss them.)}  
(4)

1.1.2 What is represented by the line \( E = Y \)?  
(4)

1.1.3 Use the formula, \( k = \frac{\Delta Y}{\Delta I} \), to calculate the multiplier (\( k \)) for the above scenario. 
\textit{(Remember that \( \Delta Y \) = the change in Income, and that \( \Delta J \) = the change in Injections.)}  
(4)

1.1.4 Calculate the multiplier, using the formula, \( k = \frac{1}{1 - MPC} \), when the marginal propensity to consume (MPC) = 0.8. Show calculations.  
(6)

1.1.5 Explain the relationship between the MPC and the multiplier. 
\textit{(Relationship is how they affect one another.)}  
(2)
QUESTION 2:  10 minutes  
(Taken from DoE Feb/March 2009)

2.1 Copy the graph below. Indicate the new consumption curve, new equilibrium formed after investment increased by R20 million, and describe the multiplier effect of the increase of investment of R20 million on the economy. 

(Remember to copy the graph as is, because you will be indicating the change on the graph. Calculate the multiplier first. Show your new formula with an increase of R20 million.)
QUESTION 3: 12 minutes  
(Taken from DoE Feb/March 2010)

3.1 Study the graph of the multiplier in a two-sector model where the consumption function is given by \( C = c + c(Y) \) on the following page, and answer the questions that follow.

![Graph of the multiplier in a two-sector model](image)

3.1.1 Define the term **multiplier**.  
*(Define means writing out the whole definition.)*  
*(3)*

3.1.2 With reference to the graph, name the TWO sectors involved in deriving the macro-economic multiplier.  
*(Please look at graph to identify the two sectors; don’t name any other.)*  
*(4)*

3.1.3 Indicate what is represented by the dotted line.  
*(2)*

3.1.4 What is the value of autonomous consumption for the original consumption function?  
*(It is only 2 marks; therefore, you don’t have to show any calculations.)*  
*(2)*

3.1.5 Suppose the marginal propensity to save (MPS) = 0.4. Use the multiplier formula to calculate the eventual change in aggregate income, if there was an injection of R10 billion into the economy. Show ALL the calculations. (HINT: Determine the size of the multiplier first.)  
*(6)*

3.1.6 Describe the relationship between the MPC and the multiplier.  
*(3)*
THE OPEN ECONOMY CIRCULAR FLOW MODEL

- **Open economy**: A country that trades with other countries.
- **Closed economy**: If a country doesn’t trade with other countries.
- The first thing you should understand is the 3 flows.

Production → Income → Spending

- These flows are influenced by four participants:
  - Household, consumer
  - Private sector, businesses
  - Public sector, government
  - Foreign sector
- The fifth participant can be the financial sector.

Source: Oxford p3
- Looking at the circular flow model, we see the following:
  - Flows:
    - Real flow (goods and services, factors of production)
    - Money flow (remuneration, expenditure)
  - Markets:
    - Product market
    - Factor market
    - Financial market

- The participants:
  - Households:
    - primary participants and consumers of goods and services
    - they sell their factors of production (labour) in the factor market to businesses
    - in return they receive remuneration
    - with their remuneration they buy goods and services on the goods market
  - Businesses:
    - they manufacture goods and services
    - they buy the factors of production from the households
  - Government:
    - provide public goods and services, e.g. safety, education, etc.
    - receive revenue from tax
  - Foreign sector:
    - trade between the foreign sector, households and businesses takes place in the foreign market in the form of imports and exports.
  - Financial sector:
    - consists of banks, insurance companies, pension funds and the JSE
    - the money which households and businesses provide are known as savings
    - spending on capital equipment by firms is called investments

- Model equations:
  \[ GDP = C + I + G (X - Z) \]
  - \( C \) = Consumer expenditure
  - \( I \) = Investments
  - \( G \) = Government expenditure
  - \( X \) = Exports
  - \( Z(M) \) = Imports

- Total expenditure:
  \[ E = C + I + G + X - Z - Te + Su \]
  - \( Te \) = expenditure on taxes
  - \( Su \) = Subsidies

- Total income (paid to factors of production)
  \[ Y = w + R + i + \Pi \]
  - \( w \) = wages
  - \( R \) = Rent
  - \( i \) = interest
  - \( \Pi \) = Profit
- **Leakages and injections**
  - **Leakages (L)**
    - Money leaving the economy
    - Types:
      - Savings (S)
      - Taxes (T) (direct and indirect)
      - Imports (Z/M)
    - \( L = S + T + Z \)
  - **Injections (J)**
    - Money going into the economy
    - Types:
      - Investments (I)
      - Government expenditure (G)
      - Exports (X)
    - \( J = I + G + X \)
- The economy is in equilibrium when \( J = L \).

**MARKETS**

**A. Product and factor markets**

- Product markets (output market):
  - Capital market
  - Durable, semi-durable and non-durable goods
  - Services
- Factor markets:
  - Human capital (labour)
  - Physical capital
  - Land (natural resources)
  - Entrepreneurs

**B. Money and financial capital markets**

- Money market:
  - This is a market for short-term savings and loans.
  - Kinds of securities that change hands in this market:
    - Banker’s acceptances
    - Short-term company debentures
    - Treasury bills
    - Reserve bank debentures
    - Short-term government bonds
  - The SARB is a key institution in the money market.
- Capital market:
  - Long-term deposits and borrowings (e.g. mortgage bonds)
  - The JSE is a key institution in the capital market.

**C. Foreign exchange market**

- Receipts for exports and payments for imports.
- Exchange rate is determined by demand and supply.
STOCKS AND FLOWS

A. Flows
- These are movements of economic variables such as production, income, spending, etc.
- Economist measure flows over a period of time.

B. Stocks
- A stock tells us about the fixed amount of an economic variable at a particular point in time.
- E.g. the number of people employed at a given time.

NATIONAL ACCOUNT AGGREGATES

- GDP: The total market value of all final goods and services produced within the boundaries of a country in a particular period (usually one year).
- In Grade 11, you learnt about the three methods of calculating GDP:
  - Expenditure method – GDP(E) or GDE
  - Income method – GDP(I) or GDI
  - Production method – GDP(P) or GDP
- These measures of economic activity are useful not only as an indicator of economic activity within a country, but also:
  - to determine the standard of living in a country
  - to compare prosperity levels between countries
  - to measure economic growth from one year to the next
- The national accounts are published by the SARB in the SARB QB (http://www.reservebank.co.za). It is also available from Stats SA (http://www.statssa.gov.za).
- The circular flow model is often referred to as the circular flow of income and expenditure, but it starts with production.
- Wants = production
- We can bring the circular flow to life by translating the illustrated flows into real amounts – the amounts that we find in our national accounts.
- Production method:
  - Production takes place in the primary, secondary and tertiary sectors.
  - However, we cannot merely add up all the market values of all outputs of all participants, because such a calculation would amount to double counting.
  - By subtracting intermediate goods from final goods we find the value that was added by each sector.

<table>
<thead>
<tr>
<th>Value added in R billion</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary sector</td>
<td>129</td>
</tr>
<tr>
<td>2. Secondary sector</td>
<td>316</td>
</tr>
<tr>
<td>3. Tertiary sector</td>
<td>908</td>
</tr>
<tr>
<td>4. Gross value added at basic prices</td>
<td>1 353</td>
</tr>
<tr>
<td>4.1 Plus taxes on products</td>
<td>174</td>
</tr>
<tr>
<td>4.2 Less subsidies on products</td>
<td>-4</td>
</tr>
<tr>
<td>5. Gross domestic product at market prices</td>
<td>1 523</td>
</tr>
</tbody>
</table>

Source: SARB QB (June 2006) S-113 & 112
• Income method:
  o GDI adds together the income earned by the owners of the factors of production.

<table>
<thead>
<tr>
<th>Income in R billion</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compensation of employees</td>
<td>680</td>
</tr>
<tr>
<td>2. Net operating surplus</td>
<td>454</td>
</tr>
<tr>
<td>3. Consumption of fixed capital</td>
<td>190</td>
</tr>
<tr>
<td>4. Gross value added at factor cost</td>
<td>1 324</td>
</tr>
<tr>
<td>5. Other taxes on production</td>
<td>34</td>
</tr>
<tr>
<td>6. Less other subsidies on production</td>
<td>-5</td>
</tr>
<tr>
<td>7. Gross value added at basic prices</td>
<td>1 353</td>
</tr>
<tr>
<td>8. Taxes on products</td>
<td>174</td>
</tr>
<tr>
<td>9. Less subsidies on products</td>
<td>-4</td>
</tr>
<tr>
<td>10. Gross domestic product at market prices (or GDI)</td>
<td>1 523</td>
</tr>
</tbody>
</table>

Source: SARB QB (June 2006) S-112

- Compensation of employees (1) consists mainly of gross salaries and wages.
- Net operating surplus (2) includes mainly the total value of goods and services that are produced, less cost. Cost has 3 elements:
  - cost of intermediate goods and services
  - cost of remuneration of employees
  - cost of the consumption of fixed capital
- The net operating surpluses show profits and surpluses before taxation.

• Expenditure method:
  o GDP(E) measures total expenditure of final goods and services produced within the borders of a country.

<table>
<thead>
<tr>
<th>Expenditure on: (in R billions)</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Final consumption expenditure by households (C)</td>
<td>968</td>
</tr>
<tr>
<td>2. Final consumption expenditure by government (G)</td>
<td>307</td>
</tr>
<tr>
<td>3. Gross capital formation (I)</td>
<td>278</td>
</tr>
<tr>
<td>4. Residual item</td>
<td>-8</td>
</tr>
<tr>
<td>5. Gross domestic expenditure</td>
<td>1 545</td>
</tr>
<tr>
<td>6. Exports of goods and services (X)</td>
<td>413</td>
</tr>
<tr>
<td>7. Less imports of goods and services (Z)</td>
<td>435</td>
</tr>
<tr>
<td>8. Expenditure on GDP at market prices</td>
<td>1 523</td>
</tr>
</tbody>
</table>

Source: SARB QB (June 2006) S-112

- GDP(E) = C + I + G + (X – Z)
Real GDP VS Nominal GDP

In order to compare the GDP of one year with that of another, the nominal (current) GDP must be changed to a real (constant) GDP. The influence of price changes on total figures must be taken into account when comparing the GDP of one year with that of another.

Real GDP = Nominal GDP x 100/deflator

The deflator is usually inflation.

Example

<table>
<thead>
<tr>
<th>Year</th>
<th>Nominal GDP (R mil)</th>
<th>Real GDP (R mil)</th>
<th>Implicit GDP deflator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>R123 126</td>
<td>R123 126</td>
<td>100</td>
</tr>
<tr>
<td>1986</td>
<td>R142 135</td>
<td>R123 595</td>
<td>115</td>
</tr>
</tbody>
</table>

Working: 142 135/123 126 x 100 = 115 (deflator)
142 135 x 100/115 = 123 595 (real GDP)

TOPIC 2: THE MULTIPLIER

THE MULTIPLIER

- The multiplier is based on the principle that spending by one person becomes the income of another person, which then becomes that person’s spending, which turns into the income of yet another person (re-spending effect).
- Example:
The Government decides to increase its spending by building new roads. This creates jobs and raises the level of employment. These newly employed people then use their income to purchase consumer goods. This stimulates the demand for goods and services and results in an increase in production, which will in turn increase the level of employment even further. This raises income and stimulates greater consumer demand and so on and so on.
- This implies that a multiplier process occurs in the economy when injections into the circular flow of spending, production and income take place.
- The multiplier refers to the ratio used to work out the difference between the initial investment and the eventual change in income. The size of the multiplier differs according to the extra income produced or created in each round of spending, but this depends on the marginal propensity to consume (mpc), that is, how many of every rand income earners are willing to spend.
- Example:
  If we say that for every R1 increase in income we spend 60c.
The mpc = 0, 6 (60/100). Of every 100c we spend 60c, therefore, it is also correct to say of every 100c we saved 40c or 0, 4 (40/100). This 0, 4 is thus the marginal propensity to save (mps).
Economy will be in equilibrium when:
- \( L = J \)
- \( S + T + Z = I + G + X \)

Disequilibria when:
- Leakages > Injections
- Leakages < Injections

Process of restoring equilibrium causes changes to national income (\( Y \)):
- National income will rise when
  \[
  I + G + X > S + T + Z
  \]
  \[
  Y < C + I + G + (X - Z)
  \]
  the amount of injections in excess of leakages ad additional demand

- National income will decrease when
  \[
  I + G + X < S + T + Z
  \]
  \[
  Y > C + I + G + (X - Z)
  \]
  the amount of leakages in excess of injections, subtract from the existing demand

In a two sector economy (households and businesses):
- \( Y = C + I \)
- \( Y = E = \) equilibrium, therefore, you should be able to show \( I = S \).
- We illustrate this by using the Keynesian 45° diagram.
Keynesian 45° diagram for a closed economy without government.

Source: Oxford p19

- Multiplier formula: \( k = \frac{\text{change in income}}{\text{change in consumption}} = \frac{\Delta Y}{\Delta C} = \frac{1}{1 - \text{MPC}} \)

\[
k = \frac{1}{1 - \text{MPC}}
\]

- **MPC (marginal propensity to consume):** The extent to which additional disposable income is spent rather than saved over a given period of time.
- E.g. if R80 in every R100 was spent the MPC would be 0.8 and the MPS (marginal propensity to save) 0.2. \( \therefore \text{MPC} + \text{MPS} = 1 \)
  \( \therefore k = \frac{1}{\text{MPS}} \)

MPS

- 3 sector economy: \( k = \frac{1}{\text{MPS} + \text{MRT}} \) (MRT = marginal rate of taxation)
- 4 sector economy: \( k = \frac{1}{\text{MPS} + \text{MRT} + \text{MPM}} \) (MPM = marginal propensity to import)
TOPIC 1: CIRCULAR FLOW

QUESTION 1

Look at the following diagram and answer the questions that follow:

Use the information in the diagram below.
Total production = 10 000
Income tax = R2 000
Savings = R1 000
Imports = R2 500

A

Households

Government

Firms

B 1 000

C 2 000

D 1 000

E

F

Savings

Foreign sector

1.1 What is the amount for the letter A in the diagram? (2)
1.2 Identify any ONE leakage in the diagram? (2)
1.3 List any ONE major real flow element in the economy. (2)
1.4 Why does an increase in exports eventually lead to an increase in consumption by households? (4)
1.5 Give an equation for GDP. (5)
QUESTION 2

2.1 The table on the following page provides hypothetical national income figures for a country, in R million. Use these figures to calculate the level of aggregate income in the country. (6)

<table>
<thead>
<tr>
<th>Exports</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government spending</td>
<td>147</td>
</tr>
<tr>
<td>Net foreign factor income earned in the country</td>
<td>10</td>
</tr>
<tr>
<td>Consumption spending by households</td>
<td>343</td>
</tr>
<tr>
<td>Imports</td>
<td>18</td>
</tr>
<tr>
<td>Savings</td>
<td>417</td>
</tr>
<tr>
<td>Interests on public debt</td>
<td>33</td>
</tr>
<tr>
<td>Private sector investment in equipment and construction (gross)</td>
<td>79</td>
</tr>
<tr>
<td>Corporate profits</td>
<td>28</td>
</tr>
<tr>
<td>Personal taxes</td>
<td>83</td>
</tr>
</tbody>
</table>

2.2 Look at the following table and answer the questions that follow.

<table>
<thead>
<tr>
<th>Nominal GDP (R mil)</th>
<th>Deflator</th>
<th>Real GDP (R mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>25 500</td>
<td>100</td>
</tr>
<tr>
<td>1991</td>
<td>27 800</td>
<td>105</td>
</tr>
<tr>
<td>1992</td>
<td>30 000</td>
<td>112</td>
</tr>
</tbody>
</table>

2.2.1 Which year is the base year? (2)
2.2.2 Differentiate between Nominal and Real GDP. (4)
2.2.3 What was the average inflation rate for 1992? (2)
2.2.4 Calculate Real GDP for 1991. (4)

TOPIC 2: THE MULTIPLIER

QUESTION 1: 24 minutes

1.1 Imagine you are given the following information for a closed economy without government.  

\[ C = 20 + 0.5Y \]
\[ I = 10 \]

1.1.1 What is the equilibrium level of income? (3)
1.1.2 What is the value of the multiplier? (6)
1.1.3 Explain the multiplier process that results from an increase in investment from 10 to 30. (8)

1.2 Draw a 45° diagram to illustrate the two expenditure functions and the respective equilibrium levels of income. (6)
1.3 Calculate the multiplier in each case:

- 1.3.1 MPC = 0.9  
- 1.3.2 MPS = 0.1  
- 1.3.3 MPS = 0.25  
- 1.3.4 MPC = 0.5

1.4 If the national income increases by R100m and the multiplier is 4, what is the change in investment?

### TOPIC 1: CIRCULAR FLOW

**QUESTION 1:** 12 minutes  
*(Taken from DoE Nov 2009)*

1.1.1 GDP is **total value of final goods and services** ✓ produced **within the boundaries/borders** ✓ of a country for a specified period. GNP is **total value of final goods and services** ✓ produced by the

1.1.2 Gross Value Added ✓ ✓

1.1.3 A = factor cost ✓ ✓

C = taxes ✓ ✓


OR

R1 771 bn. ✓ ✓ ✓ ✓ / 1 771 ✓ ✓ ✓ ✓

1.1.5 Compensation of employees ✓ ✓ ✓

1.1.6 **Foreigners contribute more to our economy than we do to their economy,** therefore a greater amount is subtracted from the GDP and less is added. ✓ ✓ ✓

*(Accept any other relevant explanation)*

**QUESTION 2:** 20 minutes  
*(Taken from DoE Nov 2008)*

**CONCEPT**

The circular flow model of the economy is a simplification showing how the economy works and the relationship between income, production and spending in the economy as a whole. The circular flow model of an open economy shows the workings of an economy that is open to foreign trade. It is different to a closed economy because it includes the foreign sector. ✓ ✓ ✓

*(Accept any other appropriate explanation of the concept.)*
There is a flow of money and goods and services between the **household sector and business sector**

Households earn income in the form of wages by selling their factors of production to business. **Business use factors of production to produce goods and services on which the household sector spends**

Thus the business will receive income.

There is a flow of money and goods and services between the **household sector and State**.

Household sector provides the state with labour and receive income.

The state provides the household with public goods and services e.g. parks, hospitals for which they pay taxes. This is income for the state.

There is a flow of money and goods and services between the **business sector and State**.

The business sector provides the state with goods and services for which the state pays.

The state provides the business sector with public goods and services for which they pay taxes.

There is a flow of goods (imports) to the business from the **foreign sector** which the business pays for. This will be regarded as expenditure for the business. There is also a flow of goods from the business to the foreign sector. This will be income for the business.
The **financial sector** consists of banks, insurance companies and pension funds. They act as a link between households and firms who have surplus money and others in the economy who require funds. The money which households and firms provide to the financial sector is known as savings. The spending on capital equipment by firms is regarded as investment. (Max. 24)

**QUESTION 3:** 13 minutes  
(Taken from DoE Nov 2010)

### 3.1
Leakages are any flow that does not give rise to a further round of income also known as withdrawals because it represents a withdrawal of money from the economy. (e.g.) of leakages are taxes (T), expenditure on imports (Z/M) and savings (S) (Max 4)

**Injections** represent the introduction of additional money into the economy (e.g.) of injections are government spending (G), income earned from exports (X), investment spending (I). (Max 4) (8)

### 3.2
Production method / Value Added Method
Income method
Expenditure method (3 x 2) (6)

### 3.3
Owns four factors of production and presents on input market
Receives income (rent, interest, wages and profit) in return
Primary sector of consumption of goods and services
Pays taxes to the government e.g. income tax
Enjoy collective goods and services delivered by the state
Spending on goods and services (domestic and foreign)
Saving as source of investment
Primary participant in the economy (Accept any other relevant fact.) (Any 4 x 2) (8)

**QUESTION 4:** 6 minutes  
(Taken from DoE Nov 2010)

### 4.1.1
A subsidy (grant) on a product is paid on the outputs to reduce the price to make it more affordable. E.g. R1 for each loaf of bread (3)

### 4.1.2
Consumption of Fixed Capital is the diminishing value of an asset over a period of time, also called depreciation. E.g. depreciation in the value of equipment, machinery, and vehicles (3)

### 4.1.3
\[
\begin{align*}
1 086 907 & \times 100 \\
2 423 323 & \div 1 \\
= 44,85 \% / 44,9\% / 45 \% & \checkmark
\end{align*}
\]

(4)

[10]
TOPIC 2: THE MULTIPLIER

QUESTION 1

1.1.1 Households/Consumers ✓✓
Business sector/Firms/Producers ✓✓ (2 x 2) (4)

1.1.2 It shows all the possible levels of expenditure and output ✓✓
at which the economy is in equilibrium ✓✓ (2 x 2) (4)

1.1.3 \( k = 20 \)
\[ 10 \] ✓✓
\[ = 2 \] ✓✓ (4)

1.1.4 \( k = \frac{1}{1 - 0.8} \) ✓✓
\[ = \frac{1}{0.2} \]
\[ = 5 \] ✓✓ ✓✓ (6)

1.1.5 The bigger the mpc, the bigger the multiplier (and vice versa) ✓✓ (2)

QUESTION 2

2.1
In the diagram above, a change in investment of R20 million, with an mpc of 0.5 will result in equilibrium moving from E to E₁ (R20 million – R60 million). The multiplier is, therefore = 2, therefore the change in income with an injection of R20 million, will be (2 x R20 million = R40 million)

The multiplier describes the situation where a change in spending causes a disproportionate change in the level of aggregate income. The multiplier effect starts off with unused resources in the economy (e.g.) increase in investment, like construction of roads leads to more jobs. The new workers would then have income to purchase consumer goods which in turn stimulates the demand for goods and services and this results in increased levels of production which further increases the level of employment. This raises income and stimulates greater consumer demand. The size of the eventual change in the income will depend on mpc (marginal propensity to consume)

**QUESTION 3**

3.1.1 The multiplier shows how an increase in spending (injection) produces a more than proportional increase in national income

3.1.2 Household

3.1.3 Business

3.1.4 Indicates all points where income = expenditure / 45º line / Keynesian equilibrium

3.1.5 M = \( \frac{1}{mps} \) = \( \frac{1}{0.4} \) = 2.5

3.1.6 The larger the MPC the bigger the multiplier and vice versa
TOPIC 1: BUSINESS CYCLE COMPOSITION AND REASONS

Learner Note: The business cycle shows what happens to the value of the domestic output (GDP) of the economy over time. The time series shows the values of a variable over time.

SECTION A: TYPICAL EXAM QUESTIONS: TOPIC 1: BUSINESS CYCLE COMPOSITION AND REASONS

QUESTION 1: 9 minutes  
(Taken from DoE Nov 2008)

1.1 Study the diagram below and answer the questions that follow.

![Business Cycles Diagram]

1.1.1 Define a business cycle.  
1.1.2 Identify the labels for the following periods in the business cycle as indicated in the above diagram:
   (a) Upswing or expansion  
   (b) Length or duration of a cycle  
1.1.3 At which point/phase in the above diagram will unemployment be at its highest?  
1.1.4 Name ONE exogenous factor that gives rise to business cycles.

QUESTION 2: 10 minutes  
(Taken from DoE Feb-March 2010)

2.1 Differentiate between exogenous and endogenous reasons for business cycles.

QUESTION 3: 5 minutes  
(Taken from DoE Nov 2010)

3.1 Discuss the Monetarist approach as a cause of business cycles.

QUESTION 4: 18 minutes  
(Taken from Feb-March 2009)

4.1 Write an essay briefly analysing the composition and features of business cycles.  
(Remember this question is part of an essay question)
Learner Note: Remember that in periods of expansion, income, output and employment all increase; government does not welcome this. Therefore, they use two policies to influence the business cycle. Together with that, Government and economic agents also want to know what is going to happen in the economy.

QUESTION 1: 4 minutes  
(Taken from DoE Nov 2008)

1.1.1 Explain how Government can stimulate economic activity in an effort to smooth out cycles. 
(3)

1.1.2 Name the method of predicting future business cycles based on the patterns of previous ones. 
(3)

QUESTION 2: 4 minutes  
(Taken from DoE Nov 2010)

2.1 List the THREE economic indicators used in forecasting of business cycles. 
(3 x 2) [6]

QUESTION 3: 6 minutes  
(Taken from DoE Feb-March 2009)

3.1 Explain how authorities use certain policies to smooth out business cycles.  
(This is part of an essay question that usually counts 50 marks) [10]

QUESTION 4: 30 minutes  
(Taken from DoE Nov 2009)

4.1 Explain, with the aid of an appropriately labeled diagram, how the various business cycle indicators can be used in forecasting.  
(Remember that only the second part of the question is based on this session) [50]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: BUSINESS CYCLE COMPOSITION AND REASONS

Introduction

- Fluctuations in the level of economic activity are part of our daily lives and influence all of us in some way or another.
- When the economic activity increases, households have more money to spend.
- When the economic activity decreases, people struggle to get jobs.
COMPOSITION AND FEATURES OF BUSINESS CYCLES

- **Business cycles**: Are successive periods of increasing or decreasing economic activity. They are also known as economic fluctuations, and they relate to changes in business conditions.

- The key variable in business cycles is *real* GDP.
- No two cycles are exactly the same or follow exactly the same course.
- All business cycles have the following:
  - Two periods, i.e. contraction (downswing) and expansion (upswing).
  - Two turning points, i.e. trough and peak.
- The upward and downward periods divide into the following phases:
  - prosperity phase (boom)
  - recession
  - depression
  - recovery
- The expansion period:
  - Level of economic activity increases
  - More goods and services are being produced
  - Household expenditure increases
  - Interest rates decrease
  - Inflation increases
- **Peak**:
  - The economy is using most of its resources, such as skilled labour and capital
  - There is an upward pressure on prices and the balance on the current account worsens as a result of higher imports.
- **Contraction period**:
  - Level of economic activity decreases
  - Less goods and services are being produced
  - Spending declines
  - Interest rates increase
  - Inflation decreases

*Source: “Enjoy economics” p24*
• Trough:
  o Turning point at the end of the contraction period.

• Actual business cycles:
  o In the table below we can see the business cycles for South Africa since World War II.

<table>
<thead>
<tr>
<th>Upswings</th>
<th>Duration in months</th>
<th>Downswings</th>
<th>Duration in months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post war – July 1946</td>
<td>7</td>
<td>August 1946 – April 1947</td>
<td>9</td>
</tr>
<tr>
<td>May 1947 – November 1948</td>
<td>19</td>
<td>December 1948 – February 1950</td>
<td>15</td>
</tr>
<tr>
<td>March 1950 – December 1951</td>
<td>22</td>
<td>January 1952 – March 1953</td>
<td>15</td>
</tr>
<tr>
<td>April 1953 – April 1955</td>
<td>25</td>
<td>May 1955 – September 1956</td>
<td>17</td>
</tr>
<tr>
<td>April 1959 – April 1960</td>
<td>13</td>
<td>May 1060 – August 1961</td>
<td>16</td>
</tr>
<tr>
<td>September 1961 – April1965</td>
<td>44</td>
<td>May 1965 – December 1965</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: South African Reserve Bank, Quarterly Bulletin, December 2005

Explanations

• There are two main reasons for the existence of business cycles: Exogenous and Endogenous.

A. Exogenous explanations

• Monetarist view.
• Factors or events that influence the economy from outside the market system.
• E.g. Weather conditions, shocks (e.g. 911), structural changes (technology), etc.
B. Endogenous explanations

- Keynesian view or interventionists.
- Factors or events that influence the economy from inside the market system.
- E.g. consumer expenditure, production, etc.

Kinds of cycles

- Kitchin cycles:
  - last between 3 and 5 years
  - caused by businesses adapting their inventory levels
- Juglar cycles:
  - last between 7 and 11 years
  - caused by the changes in net investments by businesses and government
- Kuznets cycles:
  - last between 15 and 20 years
  - caused by the changes in the building and construction industry
  - also known as the building cycle
- Kondratief cycles:
  - last 50 years and longer
  - caused by technological innovations, wars and discoveries of new deposits of resources

Remember shorter cycles occur within long cycles.

TOPIC 2: GOVERNMENT POLICY AND FORECASTING FOR BUSINESS CYCLES

Business cycles and government policy

- Governments' primary aim with business cycles is to achieve the best possible growth rates.
- During periods of expansion income, output and employment increase.
- During periods of contraction income, output and employment decrease.

What can government do during these two periods?
- Fiscal policy:
  - It's about government's budget, how it raises money and how it spends money.
  - When the economy is in an expansion, Government can increase taxation (leakage) and decrease expenditure (injection).
  - When the economy is in a contraction, Government can increase expenditure and decrease taxation.
Monetary policy:
- It focuses on the money supply and interest rates, and is controlled by the Reserve Bank.
- When the economy is in a contraction, the central bank can increase the money supply by decreasing the interest rates.
- Instruments the Reserve bank can use:
  - Interest rates
  - Cash reserve requirements
  - Open-market transaction
  - Moral suasion
  - Exchange rate policy (free-floating policy (supply and demand determine currency) or managed policy (central bank intervenes))
- It’s best for Government to use its policies in combination with one another.

The new economic paradigm (smoothing of the cycles)
- In the new economic paradigm, Government focuses less on fine-tuning and more on eliminating uncertainties with regard to fiscal and monetary policy.
- The new economic paradigm is embedded in demand-side policy and supply-side policy.

A. Demand-side policy
- Traditional monetary and fiscal policies focus by their nature on aggregate demand.
- It will have an effect on:
  - Inflation
  - Unemployment

B. Supply-side policy
- It is possible for Government to arrange things in the economy in such a way that supply is more co-operative to changes in demand.
- Government does it by doing the following:
  - reducing production costs
  - improving the efficiency of inputs
  - improving the efficiency of markets

Features underpinning forecasting
- Forecasting is the process of making predictions about changing conditions and future events that may significantly affect the economy.
- Two major measuring methods are used:
  - Quantitative methods: based on historical tie series data
  - Judgemental methods: based on opinion and understanding
A. Indicators

- Most basic forecasting is done by studying changes in the numerical values of indicators, i.e. time series data.
- Indicators predict what the economy is likely to do.
- There are many different indicators.
- There are three main groups:
  o Leading indicators
  o Co-incident indicators
  o Lagging indicators

<table>
<thead>
<tr>
<th>Leading indicators</th>
<th>Coincident indicators</th>
<th>Lagging indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net gold and other foreign reserves</td>
<td>Registered unemployed</td>
<td>Employment in non-agricultural sectors</td>
</tr>
<tr>
<td>Gold ore milled</td>
<td>Real GDP (excluding agriculture)</td>
<td>Hours worked in construction</td>
</tr>
<tr>
<td>Physical volume of mining production</td>
<td>Physical volume of manufacturing production</td>
<td>Wholesale sales of metals, machinery and equipment</td>
</tr>
<tr>
<td>Number of new motorcars sold</td>
<td>Real retail sales</td>
<td>Number of commercial vehicles sold</td>
</tr>
<tr>
<td>Real merchandise exports (excluding gold)</td>
<td>Real merchandise imports</td>
<td>Real investment in machinery and equipment</td>
</tr>
<tr>
<td>Net new companies registered</td>
<td>Utilisation of capacity in manufacturing</td>
<td>Unit labour costs in manufacturing</td>
</tr>
</tbody>
</table>

Source: “Enjoy Economics” p36

B. Leading indicators

- They show you in advance what is going to happen.
- They are before the aggregate economic activity.
- E.g. in table above.

Source: “Economics for all” p34
C. Co-incident indicators
- They move together with the aggregate economic activity.
- Provide us with current information on the state of the economy.
- E.g. in table above.

D. Lagging indicators
- They are behind the aggregate economic activity.
- They serve to confirm what has happened.
- E.g. in table above.

E. The length of a business cycle
- The length is measured from peak to peak or from trough to trough.
- Longer cycles show strength.

F. Amplitude
- **Amplitude**: The maximum departure from average vibration or oscillation (the range between peak and trough values).
- It’s not only the length but also the intensity of the contraction and expansion.
- The amplitude demonstrates two things:
  - the power of the underlying forces
  - the extent of change

G. The trend
- **Trend**: Indicates the general direction in which the indexes that were used in the business cycle, move.
- The trend line usually has a positive slope because the production capacity of a country increases over time.

H. Extrapolation
- **Extrapolation**: Means to estimate something unknown, from facts or information that is known.
- E.g. estimate a nation’s population 5 years from now, by using current data.
- You can apply extrapolation to the following:
  - the trend line
  - the trend of a curve

I. Moving averages
- Moving averages: This is a method of repeatedly calculating a series of different average values along a time series to produce a smooth curve.
- Four main concepts of the average:
  - Arithmetic: e.g. $7 + 3 + 8 + 6 = 24 \div 4 = 6$
  - Geometric: e.g. $2 \times 3 \times 4 \times 5 = 120 \sqrt[4]{120} = 10.95$
  - Median: e.g. $1 + 2 + 3 + 4 + 5$ the median is 3
  - Mode: the number that occurs most often
TOpIC 1: BUSINESS CYCLE COMPOSITION AND REASONS

QUESTION 1  20 minutes  (Source: The Answer Series)

1.1 Discuss the features and compositions of business cycles.  (16)
1.2 Discuss the causes of business cycles with reference to the exogenous and endogenous factors.  (16) [32]

TOpIC 2: GOVERNMENT POLICY AND FORCASTING FOR BUSINESS CYCLES

QUESTION 1  20 minutes  (Source: The Answer Series)

1.1 Explain how the monetary policy can be used to dampen an overheated economy.  (8)
1.2 Explain how the fiscal policy is used to stimulate a depressed economy.  (8)
1.3 Discuss the economic indicators used in forecasting.  (16) [32]

SECTIoN D: SOLUTIONS AND HINTS TO SECTIoN A

TOpIC 1: BUSINESS CYCLE COMPOSITION AND REASONS

QUESTION 1:  9 minutes  (Taken from DoE Nov 2008)

1.1.1 Refer to successive periods of increasing (expansion/upswing) and decreasing (contraction/downswing) economic activities OR
Successive periods of economic fluctuations  (3)

1.1.2 (a) CDE / CE ✔ ✔ ✔
(b) CG / AE ✔ ✔ ✔  (2 x 3) (6)

1.1.3 Point C / point G / trough ✔ ✔  (1 x 2) (2)

1.1.4 • inappropriate government policies / interventions ✔ ✔
• change in money supply ✔ ✔ ✔
• climate conditions (sunspot theory) ✔ ✔ ✔
• shocks (e.g. war, major increase in fuel price) ✔ ✔ ✔
• structural change to the economy ✔ ✔ ✔
• technology ✔ ✔ ✔
(accept any other relevant factor from an approved resource)  (1 x 3) (3) [14]
QUESTION 2: 10 minutes  
(Taken from DoE Feb-March 2010)

Exogenous reasons (explanations)
- The monetarist school of thought started in 1960 by Professor Milton Friedman. ✓✓
- The classical economists believed that the markets were inherently (naturally) stable. ✓✓
- They then presented exogenous explanations (conditions that originate outside of the market system) for periodic recessions and revivals. ✓✓
- They saw these fluctuations in economic activity as temporary due to external factors. ✓✓
- (E.g.) inventions, technological innovations, natural causes etc. ✓✓
- These fluctuations can also occur because of ineffective government policy. ✓✓
- This results in fluctuations in the rate of increase in the money supply, which causes changes in the rate of increase in prices, production and employment. ✓✓

(Any 4 x 2)

Endogenous reasons (explanations)
- Also known as the interventionist approach. ✓✓
- The Keynesians hold the view that markets are inherently unstable. ✓✓
- These economic fluctuations are caused by endogenous (Internal) causes. ✓✓
- There is a self-correcting mechanism in the market system that acts to correct any economic boom or recession. ✓✓
- (e.g.) If business conditions improve, there will be an increase in economic output, resulting in increased interest rates, increase in imports and a fall in foreign exchange. ✓✓
- All of these factors combine to dampen the economic growth and curb the boom ✓✓
- The reverse is also true; interest rates and import rates can decrease and foreign exchange can increase, leading to a recession. ✓✓
- The Keynesians believe that these fluctuations are part of the market economy and governments have a duty to use monetary and fiscal policy to intervene. ✓✓
- When the government intervenes, this brings stability to the economy and helps to smooth out the peaks and troughs in the business cycles. ✓✓

Any (4 x 2)

QUESTION 3: 5 minutes  
(Taken from DoE Nov 2010)

- Also called the sunspot theory / exogenous approach ✓✓
- Believe markets are inherently stable. ✓✓
- Departures from the equilibrium state are caused by factors outside of the market system. ✓✓
- Market forces (supply and demand) kick in and bring the economy back to its natural state or equilibrium route. ✓✓
- These interferences are not part of the normal forces operating in the market. ✓✓
- Governments should not interfere in the markets. ✓✓
- Major cause (examples) of economic fluctuations are inappropriate government policies ✓✓, undesirable increases and decreases in money supply ✓✓ weather conditions ✓✓, shocks (September 11) ✓✓, structural changes ✓✓, severe increases in the price of fuel ✓✓ and wars ✓✓

(Maximum 4 marks for examples)  (Any 4 x 2) [8]
INTRODUCTION

Business cycles refer to continuous periods of expansion and contraction of economic activity.

(Max. 3 marks)

BODY

Discussion of Graph:

NB. Do not credit for the heading if already credited in diagram.

1. Period of Recession (BC) ✓
   - During a recession, jobs are lost and there is a feeling of pessimism ✓ ✓
   - Employment levels drop, and there is a decrease in economic activity, and the economy slows down ✓ ✓
   (Max. 5 marks)

2. Period of Depression (CD) ✓
   - During a depression money is in short supply leading to a further decline in spending ✓ ✓
   - There is a negative impact on investment spending ✓ ✓
   - When economic activity is at its lowest, a trough is reached at point D ✓ ✓
   - There is competition for jobs and the cost of production decreases ✓ ✓
   - This encourages foreign trade and leads to a recovery. ✓ ✓
   (Max. 5 marks)

3. Period of Recovery (DE) ✓
   - During a recovery production increases and more jobs are created ✓ ✓
   - Business confidence rises and there is increased spending by firms ✓ ✓
   - There is increased economic activity and the country enters into a period of prosperity ✓ ✓
   (Max. 5 marks)
4. **Period of Expansion** (AB/EF) ✓

- During a period of expansion there is a great degree of **optimism** ✓ ✓. Employment levels rise, salaries and wages rise and spending increases ✓ ✓.
- A **peak** is reached at point B/F ✓ ✓.
- A larger amount of money is in circulation and this leads to an **inflationary** situation ✓ ✓.

(Max. 5 marks)

5. **Trend** ✓

- The cycle continues oscillating along a trend line and in-between upper and lower limits ✓ ✓.
- The trend line that rises gradually represents the average effect on the economy over time ✓ ✓.
- **Positively sloped**: show that GDP is rising over time on average ✓ ✓.

(Max. 5 marks)

**TOPIC 2: GOVERNMENT POLICY AND FORECASTING FOR BUSINESS CYCLES**

**QUESTION 1:** 4 minutes  
*(Taken from DoE Nov 2008)*

1.1.1 • Using expansionary monetary policies ✓ ✓ ✓
   - Reducing interest rates ✓ ✓ ✓
   - Expansionary fiscal policies ✓ ✓ ✓
   - Reducing tax ✓ ✓ ✓
   - Increased government expenditure ✓ ✓ ✓
   *(Any other relevant examples)* (Max .3) (3)

1.1.2 Extrapolation ✓ ✓ ✓  
*(1 x 3) (3)*

**QUESTION 2:** 4 minutes  
*(Taken from DoE Nov 2010)*

2.1 • Leading ✓ ✓
   - Lagging ✓ ✓
   - Coincident ✓ ✓
   *(Any 3 x 2)* [6]

**QUESTION 3:** 6 minutes  
*(Taken from DoE Feb-March 2009)*

**POLICIES USED BY THE GOVERNMENT TO SMOOTH OUT BUSINESS CYCLES**

- The **new economic paradigm**, results in the state using monetary policy and fiscal policy to smooth out the business cycle ✓ ✓.
Fiscal policy
- It has been successfully used to stimulate a depressed economy ✓✓
- e.g. by reducing taxes or by increasing the government expenditure ✓✓
- By reducing taxes households have more disposable income which increases consumption spending and stimulates economic activity ✓✓
- Increasing government spending leads to a further injection in the circular flow which stimulates economic activity ✓✓

Monetary policy
- It can be utilized more effectively to dampen an overheated economy with severe inflationary pressures ✓✓
- e.g. reduce money supply or by increasing interest rates ✓✓
- This will cause total spending to decrease and the level of economic activity to decline ✓✓

QUESTION 4: 30 minutes  (Taken from DoE Nov 2009)

BODY

BUSINESS CYCLE INDICATORS:

1. LEADING ECONOMIC INDICATORS ✓✓
- These are indicators that change before the economy changes ✓✓
- They give consumers, business leaders and policy makers a glimpse of where the economy might be heading ✓✓
- When these indicators rise, the level of economic activities will also rise in a few months’ time. ✓✓
- E.g. job advertising space/inventory/sales ratio ✓✓ (Max 6)

2. LAGGING ECONOMIC INDICATORS ✓✓
- They do not change direction until after the business cycle has changed its direction. ✓✓
- They serve to confirm the behavior of co-incident indicators. ✓✓
- E.g. the value of wholesalers’ sales of machinery ✓✓ if the business cycle reaches a peak and begins to decline then we are able to predict the value of new machinery sold ✓✓ (Max 6)

3. CO-INCIDENTAL ECONOMIC INDICATORS ✓✓
- They simply move at the same time as the economy moves ✓✓
- It indicates the actual state of the economy. ✓✓
- E.g. value of retail sales. If the business cycle reaches a peak and then begins to decline, then the value of retail sales will reach a peak and then begin to decline at same time ✓✓ (Max 6)
4. LENGTH ✔✔

- Is the time it takes for business cycle to move through one complete cycle (measured from peak to peak) ✔✔
- E.g. Useful to know the length because the length tends to remain relatively constant over time. ✔✔
- If a business cycle has the length of 10 years it can be predicted that 10 years will pass between successive peaks or troughs in the economy ✔✔
- Longer cycles show strength ✔✔
- Cycles can overshoot ✔✔ (Max 6)

5. AMPLITUDE ✔✔

- It is the difference between the total output between a peak and a trough ✔✔ / Measures the distance of the oscillation of a variable from the trend line ✔✔
- A large amplitude during an upswing indicates strong underlying forces – which result in longer cycles ✔✔
- The larger the amplitude the more extreme the changes are that may occur. ✔✔
  E.g. During the upswing inflation may increase from 5% to 10%. (100% increase) ✔✔ (Max 6)

6. TREND ✔✔

- A trend is the movement in a general direction of the economy ✔✔
- It usually has a positive slope because production capacity of the economy increases over time. ✔✔
- E.g. The diagram above illustrates an economy which is growing – thus an upward trend ✔✔
- Trends are useful because they indicate the general direction in which the economy is moving – indicate the rate of increase or decrease in level of output ✔✔ (Max 6)

. EXTRAPOLATION ✔✔

- Forecasters use past data e.g. trends and by assuming that this trend will continue, they make predictions about the future ✔✔
- E.g. if it becomes clear that the business cycle has passed through a trough and has entered into a boom phase, forecasters might predict that the economy will grow in the months that follow ✔✔
- It’s also used to make economic predictions in other settings e.g. prediction of future share prices ✔✔ (Max 6)

. MOVING AVERAGE ✔✔

E.g. the moving average could be calculated for the past three months in order to smooth out any minor fluctuations ✔✔

- They are calculated to iron out small fluctuations and reveal long-term trends in the business cycle ✔✔ (Max 6) (Body Max.40)

CONCLUSION

Business cycles will continue to have an effect on the economic well-being of South Africa in future. Although we may understand the causes of business cycles and how the economy may respond to certain policies, accurate prediction of business cycles is beyond us. ✔✔ (2)
TOPIC 1: NECESSITY OF PUBLIC SECTOR AND PROBLEMS OF PUBLIC SECTOR PROVISIONS

Learner Note: The government intervenes in a mixed economic system (remember, in grade 11 we did South Africa as a mixed economic system) when there is market failure (market failure will be done in detail in Module 2). Market failure occurs when the free market forces of supply and demand fail to lead to an efficient allocation of resources.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 4 minutes (Taken from DoE Nov 2008)
1.1 List any THREE reasons for the existence of a public sector. (3 x 2) [6]
(Only list; do not explain)

QUESTION 2: 4 minutes (Taken from DoE Feb-March 2009)
2.1 Name any THREE advantages of privatisation. (3 x 2) [6]

QUESTION 3: 4 minutes (Taken from DoE Feb-March 2010)
3.1 List any THREE arguments in favour of privatisation. (3 x 2) [6]

QUESTION 4: 10 minutes (Taken from DoE Feb-March 2010)
4.1 Explain inefficiency as a problem in providing necessity goods and services. [16]

QUESTION 5: 30 minutes (Taken from DoE Nov 2010)
5.1 Owing to problems experienced in the Department of Public Enterprises, Nomsa Dlamini, the Minister of Public Enterprises, writes a memorandum to personnel in her Department to discuss the necessity of the public sector and the macro-economic objectives of the government in detail.

Write the memorandum on behalf of Mrs Nomsa Dlamini. [50]
(Remember you have to write it in the format of a memorandum)
TOPIC 2: FISCAL POLICY, LAFFER CURVE AND PUBLIC SECTOR FAILURE

**Learner Note:** Fiscal policy refers to the government’s use of taxation and government spending to achieve the economic objectives of the state.

**QUESTION 1:** 30 minutes *(Taken from DoE Exemplar 2008)*

*Government spending, taxation and borrowing: Through fiscal policy government aims to achieve particular economic goals.*

Discuss the features, composition and effects of fiscal policy (including a clearly labelled Laffer curve). *(Remember with every essay question you must have an introduction, body and conclusion)*  

**QUESTION 2:** 10 minutes *(Taken from DoE Nov 2008)*

2.1 Explain the reasons for public sector failure. *(4 x 4) [16]*

**QUESTION 3:** 10 minutes *(Taken from DoE Nov 2009)*

3.1 With the aid of a Laffer curve, explain the relationship between tax and revenue. *(You have to draw the Laffer curve)*  

**(50)**

**SECTION B: ADDITIONAL CONTENT NOTES**

**TOPIC 1: NECESSITY OF PUBLIC SECTOR AND PROBLEMS OF PUBLIC SECTOR PROVISIONS**

**Composition of the public sector**

- The public sector consists of all those entities owned and/or controlled by government and those entities that are funded and regulated by government.
- Composition:
  - Central government:
    - Includes government department, such as Health, Education and Environmental Affairs and Tourism.
    - It also includes non-profit organisations such as CSIR and SABS.
  - General government:
    - Includes the provincial and local governments.
    - Provincial includes the administrations of the nine provinces.
    - Local government includes metropolitan, district and other municipalities.
  - Public sector:
    - Includes state-owned enterprises (SOEs)
    - Government either has majority shares (e.g. Eskom) or government owns it by law (e.g. SABS)
Necessity of the public sector

- Adam Smith identified the following three duties of government:
  - To protect its citizens against threats.
  - To maintain law and order inside the economy.
  - To provide certain necessity goods and services.

A. To provide necessity goods

- Three groups:
  - Community goods:
    - E.g. defence, police, street lights, etc.
    - Non-excludability means that individuals cannot be charged a price on the basis of use.
    - They are non-rival goods, which mean that the consumption by one does not exclude consumption by another.
  - Collective goods:
    - E.g. parks, beaches, streets, roads, bridges, etc.
    - It is possible to exclude free-riders by levying fees, charges or tolls.
    - **Free-riding**: Individuals that realise that they will benefit from goods or service even if they do not pay for it. Therefore, free-riders do not pay for goods or service but continue to consume it.
Merit goods:
- E.g. education, health care, research, libraries, etc.
- Supplied by government, because they would be inadequately consumed, either through lack of income or spending preferences, if they were supplied by the private sector.

- **Merit goods:** Consuming increases the welfare of the country.
- **Demerit goods:** Goods that are harmful.

**B. To take care of common resources**

- Our environment consist of resources that no one owns and yet everyone uses free of charge.
- Government has to intervene in order to protect the environment and prevent the creation of negative externalities.
- **Negative externality:** Imposes a cost on a second/third party.
- **Positive externality:** Exists when a second/third party gets a benefit.

**C. To manage the economy**

- Government has to ensure a social and legislative environment in which individuals and businesses can pursue their own interest to the fullest.
- Government has to apply suitable and credible economic and other policies to achieve economic objectives.

**The problems of public sector provision**

1. **Accountability**

- Does government deliver the desired quantities and quality of goods and services for which taxes are raised?
- Does government abuse the powers it was granted, for example, by creating monopolies?
- **Accountability:** Means being required to give an explanation of one’s decisions, actions and expenditure.
- In South Africa accountability is underpinned by the following:
  - Ministerial responsibilities
  - Parliamentary questioning
  - Treasury control
  - The Auditor-General (AG)
2. Efficiency

- Necessity goods are efficiently provided if Pareto efficiency is achieved.
- This is when resources are allocated in such a way that no one can be made better off without making someone else worse off.
- Three reasons for inefficiency:
  - Bureaucracy:
    - Official rules and procedures
  - Incompetence:
    - Lack of skill or inability to do task
  - Corruption:
    - Exploitation of a person’s position for private gain

3. The problem of assessing needs

- Private sector:
  - Goods and services are supplied in response to effective demand.
  - E.g. owner-occupied houses are built according to the price that people are willing to pay for them; the number and the type of houses supplied depends ultimately on the equilibrium price determined in the market.
- Public sector:
  - Goods and services are provided according to the needs of citizens.
  - E.g. authorities regard housing as a social responsibility and supply them according to the needs of people.

4. Pricing policy

- In a market economy, prices are determined by supply and demand.
- Government has three pricing options:
  - Free-of-charge services:
    - Welfare is maximised if the cost of providing some goods, is met with taxation.
    - E.g. community goods (defence, police) and collective goods
  - User-charges:
    - Charging a fee depends on the following conditions:
      - Technical reasons: e.g. providing a second lane on a road will help with traffic, and charging a toll fee will help to pay for it
      - Economic reasons
      - Political reasons
  - Subsidies

5. Parastatals

- Parastatals are SOEs and they are created in one of two ways:
  - Government starts an enterprise, or
  - An existing enterprise is nationalised.
- SOEs are companies with limited liability.
- Non-profit enterprises are referred to as entities.
6. **Privatisation**

- Privatisation means that Government sells more than 50% of the shares of state owned enterprises to the private sector.
- Privatisation provides Government with additional funds
- Privatisation increases efficiency in the economy.

**The public sector**

- Developing countries have 5 macro-economic objectives:
  - Economic growth – an increase in the production of goods and services.
  - Full employment – means all people who would like to work are employed.
  - Exchange rate stability
  - Price stability – an inflation rate between 3% and 6%.
  - Economic equity – redistribution of income and wealth through taxes.

**TOPIC 2: FISCAL POLICY, LAFFER CURVE AND PUBLIC SECTOR FAILURE**

**Fiscal policy**

- **Fiscal policy**: any attempt on the part of the government to influence the economy with changes in expenditure and taxes in order to achieve particular economic and social goals.

  **A. Features**

  - Fiscal policy has three characteristics:
    - It is goal-bound
    - It is demand biased
    - It is cyclical

  **B. Composition**

  - If the amounts are equal, we have a balanced budget. If expenditure is more than income (revenue), the budget shows a deficit. If income is more than expenditure, the budget shows a surplus.
  - Government expenditure – Government spends in order to provide necessity and merit goods, either free or at subsidised prices; to pay interest on Government debt; to redistribute income; to influence aggregate demand and supply.
  - Taxation – direct and indirect taxation (tax systems).
C. Effects (including the Laffer curve)

- Income is more evenly distributed.
- Taxation will affect consumer spending.
- Direct taxes could reduce inflationary pressure by lowering aggregate demand.
- Incentives:
  - Taxation – A Laffer curve shows the relationship between tax rates and government revenue. The principle of the Laffer curve states that if average tax rate were zero, no revenue would be raised. As the tax rate is raised above zero, tax revenues increase. After the curve peaks, tax rates become so high that the resulting fall in output more than offsets the rise in the tax rate. Tax revenue decreases. The curve also suggests that by reducing a high tax rate, Government can increase its tax revenue, as more people are willing to work and it reduces the number of people evading tax.
  - Government spending – grants and subsidies.

\[ \text{Tax revenue} \]
\[ R \quad R_1 \]
\[ 0 \quad t_2 \quad t \quad t_1 \quad 100 \]

\[ \text{Average tax rate (\%)} \]

\[ \text{The Laffer curve} \]

- Discretion – The deficit rule, borrowing rule and debt rule help with discretion.

Public sector failure

- Failure by the public sector to provide necessity goods results in the market providing them, at high prices.

A. Features

- Ineffectiveness
- Inefficiencies
B. Reasons

- Management failure
- Apathy
- Lack of motivation
- Rent-seeking interest groups (enterprises, unions and individuals that try to influence Government to act in a way which benefits them).

C. Effects

- The allocations of resources – resources are wasted.
- Economic instability
- Unfair distribution of income
- Social instability

D. Groups contributing to public sector failure

- Politicians
- Bureaucrats (public servants)
- Enterprises, unions and individuals (rent-seeking interest groups)

SECTION C: HOMEWORK

TOPIC 1: NECESSITY OF PUBLIC SECTOR AND PROBLEMS OF PUBLIC SECTOR PROVISIONS

QUESTIONS: 24 minutes

1. Discuss necessity goods.  (16)
2. Why is accountability an issue in the public sector?  (8)
3. Differentiate between Parastatals and Privatisation.  (16)

[40]

TOPIC 2: FISCAL POLICY, LAFFER CURVE AND PUBLIC SECTOR FAILURE

QUESTIONS: 23 minutes

1. Name the 5 macro-economic objectives of Government.  (10)
2. Name the 2 types of budgets that Government uses.  (4)
3. Name the reasons for public sector failure.  (8)
4. Explain the Laffer-curve by using a graph.  (16)
SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: NECESSITY OF PUBLIC SECTOR AND PROBLEMS OF PUBLIC SECTOR PROVISIONS

QUESTION 1: 4 minutes  
(Taken from DoE Nov 2008)

- Market failure / inefficient resource allocation ✓✓
- Provision of necessity goods and services ✓✓
- Problems with externalities require government intervention, e.g. negative externalities - government restricting output ✓✓
- Provision of merit goods - broad social benefit ✓✓
- Discourage demerit goods - taxes to discourage consumption and production. ✓✓
- Prevention of monopolies or encourage competition. ✓✓
- Redistribution of income for the benefit of society. ✓✓
- Managing the economy/stabilising the economy /enforcing a legal structure ✓✓

(Any 3 x 2) [6]

QUESTION 2: 4 minutes  
(Taken from DoE Feb-March 2009)

- Improve efficiency of enterprises ✓✓
- Broaden the tax base ✓✓
- Attracts foreign investment ✓✓
- Lessens pressure on government budget ✓✓
- Promotes BEE / increased share in economy ✓✓
- Provides additional funds to carry out projects ✓✓

(Any 3 x 2) [6]

QUESTION 3: 4 minutes  
(Taken from DoE Feb-March 2010)

- Provides Government with additional funds. ✓✓
- Broadens the tax base which increases government revenue. ✓✓
- Improves the efficiency of the economy. ✓✓
- Attracts foreign investment. ✓✓
- Decreases pressure on the government budget. ✓✓
- Promotes black economic empowerment. ✓✓
- Reduction of personal income tax and public debt. ✓✓

(Any 3 x 2) [6]

QUESTION 4: 10 minutes  
(Taken from DoE Feb-March 2010)

- Inefficiency means that goods and services are not provided in the desired quantity and quality ✓✓
- Necessity goods are efficiently provided if Pareto-Efficiency is achieved ✓✓
- i.e. it is impossible to make somebody better off without making the other worse off ✓✓
- Objectives like housing, health, employment etc., are not always possible because of limited resources ✓✓ and serious structural weakness in the economy ✓✓
The following aspects contribute to inefficiency:

**BUREAUCRACY** ✓✓
- There are too many rules and procedures (red tape). ✓✓
- Officials focus on following rules such that they are indifferent to the quality of service. ✓✓
- Sometimes they are insensitive to the needs of the client. ✓✓
- Policies take a long time to implement. ✓✓

**INCOMPETENCE** ✓✓
- There is a lack of skills or ability to do a task successfully ✓✓
- A reason for this could be improper qualifications, lack of training and experience etc. ✓✓

**CORRUPTION** ✓✓
- Government officials are sometimes guilty of taking bribes, committing fraud, resorting to nepotism ✓✓
- Politicians sometimes promote policies which might involve an inefficient allocation of resources in order to secure votes ✓✓
- Sometimes trade unions and businesses influence government to distribute resources so that they benefit at the country’s expense ✓✓

(Accept any other relevant facts) (Any 8 x 2) [16]

**QUESTION 5:** 30 minutes  
(Taken from DoE Nov 2010)

**DEPARTMENT OF PUBLIC ENTERPRISES ✓**  
**MEMORANDUM ✓**

TO: ALL PERSONNEL ✓  
FROM: MINISTER OF PUBLIC ENTERPRISES, NOMSA DLAMINI ✓  
SUBJECT: NECESSITY OF THE PUBLIC SECTOR AND ITS OBJECTIVES ✓  
DATE: ______________________ (Format: marks 5)

All countries have public sectors and there are good reasons for the existence of such sectors. ✓✓ The public sector is necessary for the following reasons.

1. **To provide necessity goods** ✓✓
   - Necessity goods are mostly in the form of services. ✓✓
   - Government use policies such as taxation and government spending ✓✓
   - Community goods ✓✓ are characterised by not being excluded and no competition. ✓✓
     - Non-excludability (e.g.) defence force ✓✓ The protection available to everyone living in a country irrespective of whether they are willing to pay for it or not. ✓✓
     - Collective goods ✓✓ e.g. parks, beaches ✓✓ can exclude free-riders by levying fees ✓✓

2. **To take care of common resources** ✓✓
   - Environment consists of resources that no one owns, yet everyone can use free of charge. ✓✓
   - (e.g.) oceans for fishing / the air we breathe / natural scenery we enjoy ✓✓
   - Governments have to intervene in order to protect the environment and prevent the creation of negative externalities / protection and enforcement of legal structure ✓✓
3. To manage the economy.
- Governments manage the collective interests of its people.
- Government has to ensure a social and legislative environment in which businesses and individuals can pursue their own interests to the maximum.
- Government must also apply suitable and credible economic and other policies in order to achieve internationally respected economic objectives.
- Public policy needed to secure high employment, price stability and socially desired rate of economic growth.

4. Externalities
- Benefits or costs from production of goods and services.
- Government can subsidise or restrict production.

5. Merit and demerit goods
- Merit goods benefit the public more than private goods.
- e.g. health care and education.
- Demerit goods are goods considered to be harmful to society.
- Government imposes taxes and regulations to discourage consumption.
- e.g. cigarettes.

6. Monopolies and imperfect competition
- Government should intervene and prevent economically inefficient and imperfect competition from occurring.

In developing countries governments have FIVE macro-economic objectives.

A. Economic growth
- Refers to an increase in the production of goods and services in the economy.
- It is measured in terms of real GDP.
- For economic development to occur, economic growth rate must be higher than the population growth rate.
- Growth and development in a country benefits its citizens because it often leads to a higher standard of living.

B. Full employment
- Accept any relevant definition.
- Government is always trying to attain high levels of employment.
- Unemployment rate increased from 14,0% in 1994 to 26,5% in 2005.
- Employment increased mainly due to informal sector activities.
- The GEAR strategy was implemented to create a climate that was conducive to employment creation by the private sector.

C. Exchange rate stability
- The government should manage the economy through effective fiscal and monetary policies so that the exchange rate remains relatively stable.
- Depreciation and appreciation of a currency could create uncertainties for producers and traders and should be limited.
- The SARB changed the exchange rate from a managed floating system to a free-floating exchange rate system.
D. Price stability ✓ ✓
- SARB has succeeded in keeping inflation within the target range of 3% - 6% ✓ ✓
- Market economies produce better results in terms of economic growth and development when prices are relatively stable. ✓ ✓
- Interest rates, based on the repo rate, are the main instrument used in the stabilisation policy. ✓ ✓
- The stable budget deficit also has a stabilising effect on the inflation rate. ✓ ✓

E. Economic equity ✓ ✓
- Redistribution of income and wealth is essential in market economies. ✓ ✓
- In South Africa, the progressive tax system is used. ✓ ✓
- Progressive income tax ✓ ✓ tax on profits ✓ ✓, wealth and expenditure are used to finance free social services ✓ ✓ (e.g.) health ✓ ✓ education ✓ ✓ and to pay cash grants to the poor ✓ ✓ (e.g.) pensions ✓ ✓ and other vulnerable people ✓ ✓

(Max. 40)

MRS NOMSA DLAMINI ✓ ✓ DATE
MINISTER OF PUBLIC ENTERPRISE

TOPIC 2: FISCAL POLICY, LAFFER CURVE AND PUBLIC SECTOR FAILURE

QUESTION 1: 30 minutes (Taken from DoE Exemplar 2008)

FEATURES:

1. It is goal-bound ✓ ✓
- Central government use budgetary process of consultation and persuasion to determine economic and social goals ✓ ✓
- Provincial and local governments execute approved budget goals ✓ ✓

2. It is demand biased ✓ ✓
- Fiscal policy is a main policy instrument in demand-side policies – elements also used to realise supply-side objectives ✓ ✓
- E.g. when Government improves infrastructure, uses taxation as incentive, allows rapid depreciation of assets and subsidises human resource development ✓ ✓

3. It is cyclical ✓ ✓
- Business cycle has direct effect on fiscal policy – during upswing income and profits increase – increase in aggregate demand and expenditure – increase in income tax and profit – government’s income higher – higher levels of spending ✓ ✓
- Opposite happens in downswing – therefore, fiscal policy should be anticyclical, so that smoothes out extreme fluctuations ✓ ✓

(Max. 12)
COMPOSITION:
Instruments of fiscal policy are government spending and taxation: balanced budget; if expenditure > income: deficit; if income > expenditure: surplus ✓ ✓
1. Government spending ✓ ✓
   • Government spending classified in 2 formats: functional and economic ✓ ✓
     Spending to provide necessity and merit goods (free or subsidised prices), pay interest on debt; redistribute income; influence aggregate demand; influence aggregate supply ✓ ✓
2. Taxation ✓ ✓
   • Government imposes taxation to: raise revenue for expenditure; discourage consumption of demerit goods; convert external into private costs; discourage purchase of imports; redistribute income; influence level of aggregate demand; influence level of aggregate supply ✓ ✓
3. State debt ✓ ✓
   • Main budget must balance – if deficit: loans incurred to balance; if surplus: savings set off against debt ✓ ✓
   • After adding extraordinary transfers and receipts = net borrowing requirement – borrowing adds to loan debt, known as public debt ✓ ✓ (Max. 12)

EFFECTS (INCLUDING LAFFER CURVE)
Fiscal policy effects depend on period of business cycle – during upswing policy contracts – during downswing policy expands ✓ ✓
1. Income distribution ✓ ✓
   • Progressive taxes make income more evenly distributed and regressive taxes make income less evenly distributed – proportional taxes leave distribution unchanged ✓ ✓
   • Spending on social goods, security and welfare payments supplement income of poor more than the rich ✓ ✓
   • E.g. 20 % of SA population enjoyed cash income from welfare and social security in 2005 ✓ ✓
2. Consumption ✓ ✓
   • Direct and indirect taxes will affect total and pattern of consumer spending ✓ ✓
   • Direct taxes reduce disposable income – effect on consumption depends on propensity to consume, and level of saving ✓ ✓ - direct taxes will reduce consumption with little savings
   • Income multiplier kicks in when government spending increases due to higher levels of employment, higher income, and consumer spending ✓ ✓
3. Price level ✓ ✓
   • Direct taxes reduce inflationary pressure – lower aggregate demand ✓ ✓
   • Result in cost-push inflation – stimulate workers - claim higher wages ✓ ✓
   • Rise in indirect taxes raise general price level ✓ ✓
   • Inflationary and deflationary spending depends on availability of production factors ✓ ✓
4. Incentives

- **Taxation** direct taxes (income and company tax) reduce incentive to work, save, invest and take risks. High and progressive rates keep people from entering job market.
- **Laffer-curve**: if average tax rate were zero no revenue would be raised – if tax rate raised above zero, tax revenues increase – curve slope upwards – then peaks (t) – thereafter, tax rates become so high (t1), fall in output is more than rise in tax rate.
- Suggests that cut in high rate of income tax from t1 to t increase tax revenue from R1 to R. – encourage people to work – reduce tax evasion and avoidance.
- By decreasing taxation from t1 to t2 has no effect on revenue of state, but reduces tax rate by 2/3.
- In most countries tax rates are below t - SA’s tax rates also reduced.
- Government spending grants and subsidies serve as incentives for vital municipal services and feeding schemes.

   □ Graph:

5. Discretion

- Minister of Finance uses discretion, e.g. how much to reduce income tax or spend on new infrastructure.
- Discretion limits: deficit rule (3 % of GDP); borrowing rule (only for capital expenditure); debt rule (not exceed 60 % of nominal GDP).

   (Graph: 4 marks Max. 16) [40]
QUESTION 2: 10 minutes  
(Taken from DoE Nov 2008)

- Politicians tend to promote policies and spend money on projects as long as they get votes in return. ✓✓ These policies might involve an inefficient allocation of resources. ✓✓
- Many public sector entities lack capacity because of a shortage of skills / management failure / Bureaucracy✓✓ This means that funds are often left unspent and then returned to the treasury. ✓✓
- Lack of accountability / Parastatals (public enterprise) ✓✓ leads to inefficiency, corruption / crime, and poor service delivery. ✓✓
- Lack of motivation / apathy ✓✓ Workers rarely receive incentives for successful service delivery. This leads to services being limited, low in quality and high in cost. ✓✓
- Rent seeking / special interest groups / own interest ✓✓ Individuals and enterprises influence Government to act in their interest e.g. profitable contracts, favourable regulations, etc. ignorance, personal and hidden agendas, questionable motives improve the welfare of someone at the expense of another. ✓✓
- Serious structural weakness in the economy / Privatisation ✓✓ This can result in social goals not being attained. ✓✓
  - Objectives are not attainable / overpopulation ✓✓ employment, housing and feeding programmes not possible with limited resources ✓✓
  - Assessing needs ✓✓ leads to under and oversupply ✓✓
  - Pricing policy ✓✓ problems in determining the price for necessity goods and services ✓✓

(Any 4 x 4) [16]

QUESTION 3: 10 minutes  
(Taken from DoE Nov 2009)
• The Laffer curve shows the relationship between tax rates and tax revenue collected by the government ✓ ✓
• The curve shows that as tax increase government revenue increases up to a certain point (e.g. $t_1$) ✓ ✓
• If the tax rate rises beyond ‘t’, (e.g. at $t_1$ there will be a decline in government revenue ✓ ✓
• When the tax rate is high, people are less likely to work hard ✓ ✓
• If tax is 100% then nobody will work because all income would go to the government ✓ ✓
• Too high tax rates may lead to tax evasion and avoidance ✓ ✓
• Reduction in tax rates will lead to a decrease in tax evasion and increase the incentive to work, save and invest ✓ ✓
• If tax rate is zero, no government revenue will be raised ✓ ✓
• Economists use this to justify a reduction in the level of income tax ✓ ✓
• The apex of the curve shows the tax rate where government revenue can be maximised ✓ ✓
• **This point can vary from country to country** – the Laffer curve may not always be symmetrical – it can peak at 40% or even at a 90% rate ✓ ✓
• Evidence suggests that tax rates in most countries are below $t$. ✓ ✓
• In South Africa individual and company income tax rates were reduced over the last decade ✓ ✓
TOPIC 1: PERFECT MARKET COST AND REVENUE CURVES

Learner Note: Make sure you understand the difference between perfect and imperfect market. Revise and understand Grade 11 cost and revenue curves.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 30 minutes (Taken from DoE Nov 2008)

‘Markets are at the centre of economic activities and provide the dynamics for the performance of economies.’

Discuss perfect competition as a market structure with special reference to the definition and characteristics.

Conclude your discussion with reasons why you would not participate in the market under conditions of monopolistic competition. (Max 10)

(This question is an essay question and should have an introduction, body and conclusion)

QUESTION 2: 3 minutes (Taken from DoE Nov 2008 and 2009)

Choose the correct answer in brackets:

2.1 All products sold in the perfect market, are (homogeneous/heterogeneous). (2)

2.2 A mechanism that brings buyers and sellers together is known as a (tribunal/market). (2)
TOPIC 2: PROFIT MAXIMISING IN A PERFECT MARKET

**Learner Note:** For this section the difference between perfect and imperfect market, and Grade 11 cost and revenue curves is important. Profit maximisation is where MR = MC.

**QUESTION 1:**
12 minutes  
*(Taken from DoE Exemplar 2008)*

Study the following graphs and answer the questions that follow:

1.1 Which of the above graphs are associated with (i) loss (ii) normal profit (iii) economic profit?  
1.2 Define *normal profit*.  
1.3 Identify the profit maximisation point in Graph B.  
1.4 Calculate the total economic loss as reflected in Graph C. Show ALL calculations.  
1.5 Calculate total revenue as indicated in Graph A.

**QUESTION 2:**
12 minutes  
*(Taken from DoE Nov 2009)*

Study the graph on the following page and answer the questions that follow.
2.1 Define the concept *market.*

2.2 Under which market conditions will the above market situation prevail? Motivate your answer.

2.3 Identify the market price from the graph.

2.4 Determine the profit maximisation point on the graph.

2.5 Distinguish between *short-term* and *long-term equilibrium.*

2.6 What does the shaded area represent in the above graph?

**QUESTION 3:**

**30 minutes** *(Taken from DoE Feb-March 2010)*

With the aid of the graphs below, examine the dynamics of long-term equilibrium in the individual firm and industry under conditions of perfect competition.

**MARKET**

**INDIVIDUAL FIRM**

*(This question is an essay question and should have an introduction, body and conclusion)*
SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: PERFECT MARKET COST AND REVENUE CURVES

Introduction

- **Market**: An institution or mechanism that brings together the buyers and sellers of goods or a service. It is also a place where demand and supply interact to determine a price.
- We distinguish between 4 broad types of markets:
  - Perfect competition
  - Monopolistic competition
  - Monopoly
  - Oligopoly
- The distinction between markets is based on the following features:
  - Number of businesses in market
  - Nature of product
  - Accessibility of the market
  - Extent of control over prices an individual business has
  - Information on market conditions available

Perfect Competition

- **Perfect competition**: is a market structure with a large number of participants who are all price-takers, there are no entry or exit barriers in the long run, all information is available to both buyers and sellers, and a homogeneous product is sold.
- Good example is the *stock market.*
- **Price-taker**: A buyer or sellers who cannot influence the price of his/her own product.
Whether you personally choose to buy oranges, or not to buy them, has no effect on the market price - the lesson of perfect competition is that each economic agent, seller or buyer, is insignificant in the greater scheme of things.

Source: Oxford p77

**Characteristics**

1. Large number of buyers and sellers
2. All products are homogeneous
3. Complete freedom of entry and exit
4. All factors of production are mobile
5. Both buyers and sellers have got full knowledge
6. Collusion between sellers does not occur
7. No government intervention.
Industries and Individual businesses

- All businesses produce an identical product; this means that the products produced are all perfect substitutes for each another.
- Under perfect competition the individual producer cannot charge a higher price ($P_2$) and will not sell its product at a lower price ($P_0$).
- If the producer tries to sell the product at the higher price, it will lose all its customers, since they can buy the exact same product from someone else at a price of $P_1$.
- The producer will also not sell it at $P_0$ since it can in any case sell all its output at the market price of $P_1$ and it wishes to maximise its profits.
- The individual producer needs to decide the quantity supplied ($Q_1$ or $Q_2$), this will have no effect on the market price.
- A change in the market price can take place, if the market supply increases. This could, for instance, be the result of good rains in the maize industry, which implies that most producers will increase the quantity maize supplied to the market.
- From demand and supply analysis, we know that an increase in supply will cause a rightward shift of the market supply curve, and the equilibrium price will fall.

The market structure

- Summary of market structures:

<table>
<thead>
<tr>
<th>Feature/criterion</th>
<th>Perfect Competition</th>
<th>Monopolistic Competition</th>
<th>Oligopoly</th>
<th>Monopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of businesses</td>
<td>So many that no business can influence the market price</td>
<td>So many that each business thinks others will not detect its actions</td>
<td>So few that each business must consider the others' actions and reactions</td>
<td>One</td>
</tr>
<tr>
<td>Nature of product</td>
<td>Homogeneous/standardised</td>
<td>Heterogeneous/differentiated</td>
<td>Homogeneous or heterogeneous</td>
<td>A unique product with no close substitutes</td>
</tr>
<tr>
<td>Entry</td>
<td>Completely free</td>
<td>Free</td>
<td>Varies from free to restricted</td>
<td>Completely blocked</td>
</tr>
<tr>
<td>Information</td>
<td>Complete</td>
<td>Incomplete</td>
<td>Incomplete</td>
<td>Complete</td>
</tr>
<tr>
<td>Collusion</td>
<td>Impossible</td>
<td>Impossible</td>
<td>Possible</td>
<td>Irrelevant</td>
</tr>
<tr>
<td>Business's control over price of product</td>
<td>None</td>
<td>Some</td>
<td>Considerable, but less than in monopoly</td>
<td>Considerable, but limited by market demand and goal of profit maximisation</td>
</tr>
<tr>
<td>Demand curve of the business's product</td>
<td>Horizontal (perfectly elastic)</td>
<td>Downward sloping</td>
<td>Downward sloping, may be kinked</td>
<td>Equal market demand curve, downward sloping</td>
</tr>
<tr>
<td>Long-run economic profit</td>
<td>Zero (normal profit only)</td>
<td>Zero (normal profit only)</td>
<td>Can be positive</td>
<td>Can be positive</td>
</tr>
<tr>
<td>Examples</td>
<td>International commodity market and JSE</td>
<td>Fast-food outlets</td>
<td>Petrol and oil makers, and cell phone industry</td>
<td>Eskom</td>
</tr>
</tbody>
</table>
Perfectly competitive market structure

- Do the following exercise to show the short-run cost of a firm in a perfectly competitive market and then the Revenue calculations to show that D=AR=MR.
- Remember that under perfect competition the firm sells each unit at the same price, therefore, TR increases by the same amount when the extra unit is sold and MR=price.

TOPIC 2: PROFIT MAXIMISING IN A PERFECT MARKET

Output, supply, profits and losses

Output decisions of the individual producer

- Because the individual firm cannot influence the price, it has to decide whether it is going to shut-down or continue producing goods. The individual firm decides this by looking at its cost curves.
- Shut-down point:
  o The first warning lights will be when TR is less than TC of production. At this point the firm will make a loss, but making a loss isn’t enough reason to shut down a business.
  o They will shut down when:
    - TR < TVC
    - P < AVC
- Summary diagram of the shut-down rule for the firm:

  ![Individual producer diagram]

Profit maximisation

- MR = MC → Profit maximisation
- MR > MC → Profits increasing
- MR < MC → Profits decline
- Profit maximisation can be presented as follows:
Normal profit

- Normal profit is equal to the best return that the firm’s self-owned, self-employed resources could earn elsewhere.
- A firm makes a normal profit when the TC of production is equal to the TR that the firm makes from the sale of the output.
- In other words, the normal profit is part of the cost of production.
- The normal profit is the profit that the firm must make to ensure that it remains in the industry.
- Break-even is when the firm makes a normal profit.
- AR = AC or RT = TC
Economic profit

- Economic profit is equal to the total revenue that exceeds the total cost.
- This is when the firm is making more than the normal profit.

Economic loss

- If the firm makes less than a normal profit, then it is making an economic loss.
- It will pay the firm to leave the industry at this point.
SECTION C: HOMEWORK

TOPIC 1: PERFECT MARKET COST AND REVENUE CURVES

QUESTION 1: 5 minutes (Source: Focus study guide)

Identify the characteristics of perfect competition. [8]

QUESTION 2: 21 minutes (Source: Oxford Economics)

2.1 Name four types of short-run costs. [8]

2.2 Complete the following table. [27]

<table>
<thead>
<tr>
<th>Q</th>
<th>P</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
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<tr>
<td>8</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

[35]

TOPIC 2: PROFIT MAXIMISING IN A PERFECT MARKET

QUESTION 1: 17 minutes (Source: Oxford Economics)

1.1 Make use of graphs to illustrate the difference between normal profit and economic profit. [16]

1.2 Define break-even point. [4]

1.3 Define profit maximisation output. [4]

1.4 What is meant by the term economic loss? [4]

[28]
SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: PERFECT MARKET COST AND REVENUE CURVES

QUESTION 1: 30 minutes (Taken from DoE Nov 2008)

INTRODUCTION

Definition:
It is a market structure with a large number of participants who are price-takers, there are no entry or exit barriers in the long run, all information is available to both buyers and sellers, and a homogeneous product is sold OR A market in which the conditions for perfect competition are satisfied OR Perfect competition occurs when none of the individual market participants can influence the price of the product ✓ ✓ ✓ (Max. 3)
(Accept any other definition.)

BODY

Characteristics:

- Many buyers: ✓ ✓ The number of buyers in the market is so large that individual market participants are insignificant in relation to the market as a whole. ✓ ✓ This has the important implication that no individual buyer is able to influence the market price. ✓ ✓
- Many sellers: ✓ ✓ The number of sellers in the market is so large that the individual seller cannot influence the market price (price takers). ✓ ✓
- Homogenous product: ✓ ✓ All the products sold in the specific market are homogenous, ✓ ✓ that is, they are exactly the same regarding quality, appearance, etc. It makes no difference to a buyer where or from whom he/she buys the product. ✓ ✓
- Freedom of entry / exit: ✓ ✓ There is complete freedom of entry and exit, that is to say, the market is fully accessible. ✓ ✓ Buyers and sellers are completely free to enter or to leave the market. Entry should not be subject to any restrictions in the form of legal, financial, technological or other barriers that curtail the freedom of movement of buyers and sellers. ✓ ✓
- Mobility of factors of production: ✓ ✓ All factors of production are completely mobile, ✓ ✓ in other words, labour, capital and all other factors of production can move freely from one market to another. ✓ ✓
- Perfect information: ✓ ✓ Both buyers and sellers have full knowledge of all the prevailing market conditions. ✓ ✓ For example, if one business ventured to raise its price above the market price, buyers would immediately become aware of it and would switch their purchases to businesses who still charge the lower price. ✓ ✓
- No collusion: ✓ ✓ Collusion between sellers does not occur. ✓ ✓ In a perfectly competitive market, each buyer and seller acts independently from one another. Collusive practices are illegal in South Africa, according to the Competition Act 1998. ✓ ✓
- Unregulated market: ✓ ✓ There is no government intervention that could affect buyers or sellers. ✓ ✓ Decisions are left to individual sellers or producers and buyers. ✓ ✓
- No preferential treatment (no discrimination) ✓ ✓ nobody is advantaged above the others ✓ ✓
- Efficient transport and communication: ✓ ✓ Makes access to and from markets possible. ✓ ✓ Max. (8 x 4) (32)
CONCLUSION

Monopolistic Competition

Disadvantages for the firm and consumer

- Consumers pay a higher price under monopolistic competition ✓✓
- Output of monopolistic competition is less than that of the perfect competitor. ✓✓
- Monopolistic competitor is unable to produce at the ideal production levels ✓✓
- Monopolistic competition is, therefore, neither allocatively nor productively efficient
- Inefficient use of resources in the case of monopolistic competition – perfect competitor produces more at lower prices – therefore, more efficient in the use of resources ✓✓
- Market information on monopolistic competition is incomplete ✓✓

Max. (5 x 2) [50]

QUESTION 2: 3 minutes (Taken from DoE Nov 2008 and 2009)

2.1 Homogenous ✓✓
2.2 Market ✓✓

[4]

TOPIC 2: PROFIT MAXIMISING IN A PERFECT MARKET

QUESTION 1: 12 minutes (Taken from DoE Exemplar 2008)

1.1 (i) loss = C ✓✓
(ii) normal profit = A ✓✓
(iii) economic profit = B ✓✓

(3 x 2) (6)

1.2 Normal profit is a situation where total revenue is exactly equivalent to total costs – is amount entrepreneur pays himself – expense – minimum earnings required to prevent entrepreneur from leaving production sector / AR = AC ✓✓✓ (3)

1.3 E2 where MR = MC ✓✓✓

1.4 TR – TC = Total economic loss ✓✓
(R6 X 60) – (R8 X 60) = total economic loss ✓✓
R360 – R480 = -R120 ✓✓✓

(3 x 2) (6)

1.5 Total revenue = R8 X 80 = R640 ✓✓

(2)

[20]

QUESTION 2: 12 minutes (Taken from DoE Nov 2009)

2.1 A market is a place or circumstance ✓ where buyers and sellers interact ✓ to determine the price and quantity. ✓✓

(3)

2.2 Perfect Competition / Perfect Market. ✓✓
Where: P₁ / OP₁ (Market price) = MC = MR = AR / The demand curve is horizontal / parallel to the quantity axis ✓✓✓

(5)

2.3 P₁ / OP₁ ✓✓

(2)

2.4 E₃ / MC = MR / where MC intersects AVC at its minimum turning point ✓✓

(2)
2.5 Short-term equilibrium – The period is so short that it is possible to vary the quantity of at least one input. All other inputs are fixed / Demand equals supply – economic profit/loss ✓✓

Long-term equilibrium – There are no fixed inputs, all the inputs are variable. The period is long enough to vary all the inputs / Firms can only make normal profit ✓✓

(2 X 2) (4)

2.6 Economic Loss. / Loss ✓✓✓✓

(4)

[20]

QUESTION 3: 30 minutes (Taken from DoE Feb-March 2010)

INTRODUCTION

The industry is in equilibrium at the price that clears the market, namely at the price at which the quantity demanded is exactly equal to the quantity offered ✓✓✓✓ (Max. 3)

BODY

1. In the long run, two things can change:
   - New firms can enter the industry and existing firms can leave. ✓✓
   - All factors of production became variable and existing firms earning economic profit in the short run may decide to expand their plant size to realize economies of scale. ✓✓

2. Economic profit ✓✓
   - Suppose the business's short-term plant is represented by SAC₁. ✓✓
   - If the market price is P₁ the business is making an economic profit of P₁E₁FP₂ with the short-term plant-size represented by SAC₁. ✓✓
   - At a price of P₁ the business will maximise profit in the short-term at point E₁ where the profit maximisation (MR=MC) applies, and the quantity q₁ will be produced. ✓✓

3. Bigger plant, lower unit cost ✓✓
   - If the producer does a cost estimate, he/she will realize that, if he/she will be able to produce at a lower unit cost in the long-run, ✓✓
   - As illustrated by the downward sloping portion of the LAC curve. ✓✓
   - The prospect of increased profit would therefore encourage the producer to build a bigger plant. ✓✓
   - The business would however not be interested in producing output levels greater than those presented by the minimum point E₂ ✓✓
   - Of the LAC because such output levels are only possible at higher cost levels – internal scale disadvantages cause the LAC to rise to the right of point E₂. ✓✓4. New entrants, increased supply ✓✓
   - The economic profit that businesses make is likely to attract new businesses to the industry. ✓✓
   - Because the quantity offered on the market increases as a result of expansion by existing businesses and the entry of new businesses. The supply curve on the market will shift to the right from S to S₁ and the price will drop until it eventually reaches P. ✓✓
5. Initial losses
- Individual firms can be in equilibrium in the short run where it makes an economic profit or an economic loss.
- These positions, however, are not sustainable in the long run under conditions of perfect competition.
- If the market price is below the minimum point of the long-term average cost curve, the adjustment process simply works the other way around.
- Eventually the LAC curve will also form a tangent with the demand curve and the businesses that have remained in the industry will be making normal profit.

6. Price in the long term
- The above analyses leads to the conclusion that under perfect competition the price of a product in the long term will settle at a level that corresponds to the lowest point of the LAC curve.
- A point such as $E_2$ represents the equilibrium point of the business in the long run.
- The business is making normal profit and there will be no incentive to leave or enter the industry.
- When a market price has been established under perfect competition at a level where each business is in equilibrium at the minimum point of its LAC curve and only making normal profit, the industry will also be in long-term equilibrium.

7. Equilibrium
- Once long-term equilibrium has been achieved, and provided that there are no changes in the technology or the factors of production, there will be no further entry or exit of businesses.

CONCLUSION
- Under perfect competition in the long-term, the market mechanism will lead to an optimal utilisation of factors of production due to the following reasons:
- The output is produced at the lowest possible cost (minimum point of LAC)
- The consumer pay the lowest possible price for the product (price = the lowest cost at which the product can be produced)
- The price of the product = the opportunity cost of producing the product.
- All businesses are making normal profits only.
TOPIC 1: IMPERFECT MARKET - MONOPOLY

Learner Note: You need to revise the following concepts, marginal revenue (MR), marginal cost (MC) and profit maximisation. Make sure you understand the profit maximisation rule – where marginal revenue is equal to marginal cost, applies to all firms regardless of the market structure. Monopoly is a market structure where only one seller (firm) controls the market.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 4 minutes  
(Taken from DoE Exemplar 2008)
List any THREE characteristics of a monopoly.  
(3 x 2) [6]

QUESTION 2: 12 minutes  
(Taken from DoE Feb-March 2009)
Study the graph below and answer the questions that follow.

THE FIRM IN AN IMPERFECT MARKET

2.1 Define the term imperfect market.  
(3)
2.2 Is the above graph indicating a short- or long-run equilibrium?  
(3)
2.3 What determines the optimum production level in a monopoly market?  
(3)
2.4 Indicate the profit area on the graph, by using the labelling system used in the graph.  
(3)
2.5 Explain why the AR and MR curves are two different curves.  
(6)
2.6 If you assume that the MC curve represents the supply curve for a perfect market, what will the effect on the price of goods be?  
(2)
QUESTION 3:  30 minutes

(Taken from DoE Nov 2009)

Examine the monopoly as a market structure and briefly compare it to the perfect market. [50]

QUESTION 4:  5 minutes

(Taken from DoE Nov 2010)

Draw a fully labelled graph to illustrate economic profit for a monopolist in the short run. [8]

TOPIC 2: IMPERFECT MARKET – OLIGOPOLY

Learner Note: Oligopoly is a market structure where a few firms control the market. Also make sure that you understand how collusion takes place between firms in an oligopoly.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1:  10 minutes

(Taken from DoE Exemplar 2008)

Discuss the characteristics of a typical oligopoly. (4 x 4) [16]

QUESTION 2:  4 minutes

(Taken from DoE Nov 2008)

With reference to oligopolies, list any THREE forms of non-price competition. (3 x 2) [6]

QUESTION 3:  5 minutes

(Taken from DoE Nov 2008)

Discuss collusion by oligopolies. [8]
QUESTION 4:  6 minutes  
(Taken from DoE Nov 2010)

Study the extract below and answer the questions that follow.

R53 MILLION FINE FOR PRICE FIXING

COLLUSION: Health group fixed prices of medical supplies

Tiger Brands CEO says their firm is 'upset and embarrassed' by the involvement of Adcock Ingram Critical Care (AICC) in collusion, for which it will pay a R53 million penalty. This follows yesterday's announcement that AICC admitted to being involved in collusive tendering with its competitors for a state tender for intravenous medical products.

The Competition Commission said the penalty it imposed on AICC equates to eight percent of the division's annual turnover, and that the penalty is the highest imposed by it to date – in percentage terms – for collusive behaviour. The commission has referred the matter to its sister body, the Competition Tribunal, to confirm the order.

[Adapted from: Business Times, 2007]

1. State TWO aims of the competition policy in South Africa. (4)
2. Explain the role played by the Competition Tribunal regarding AICC’s anti-competitive behaviour. (3)
3. Which body/institution can AICC approach if it had not been happy with the penalty imposed by the Competition Tribunal? (3)

QUESTION 5:  5 minutes  
(Taken from DoE Nov 2010)

Discuss how non-price competition influences the behaviour of oligopolists. [8]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: IMPERFECT MARKET – MONOPOLY

Introduction

- Remember prices cause supply and demand to change.
- Prices also dictate the quantities of goods and services that are produced and traded.
- These changes provide the energy that brings about economic growth and employment.
- The main characteristics of perfect competition are that many buyers and sellers operate in the market, and that the market mechanism determines the price negotiated as well as the quantity traded.
- Although imperfect markets differ from perfectly competitive markets in the way prices are established, they trigger similar forces and have similar effects.
- In imperfect markets businesses are price makers or price setters.
- Imperfect markets are classified into 3 main markets:
  - Monopoly
  - Monopolistic competition
  - Oligopoly
MONOPOLIES

- **Monopoly**: It exists when there is only one seller of goods or services for which there is no close substitute - e.g. Eskom.

**Types of monopolies**

- Legal monopoly – It is based on laws preventing other companies from competing (State monopoly).
- Local monopoly – A local monopoly will control the market in a particular area or town, e.g. if there is only one petrol station.
- Natural monopoly – This arises in industries where economies of scale are so large that a single business can supply the entire market, e.g. electricity.
- Horizontal monopoly – This occurs when a parent company takes control over several smaller companies, e.g. Naspers in the printing business.
- Vertical monopoly – This occurs when 1 firm will supply and produce the product, e.g. Eskom.
- Coercive monopoly – This occurs as a result of any activity that violates the principles of a market economy.

**Characteristics of a monopoly**

- No competition – one business controls the supply of goods or service.
- No substitutes – no substitutes on the market for the consumer to choose from.
- Price makers – one business controls the price of the goods or services.
- Barriers to entry – e.g. technology or patents, may keep new companies out.
- Imperfect information – the consumer doesn’t have all the information, e.g. profit margin.
- No homogenous products – they will produce only one product or different varieties.
- Large amount of starting capital is needed.
- Legal considerations – new inventions are protected by patent rights.

**Revenue curves**

- Remember that a monopoly is a price maker.
- Calculations: \( TR = P \times Q \)
  
  \[
  AR = P \\
  MR = \frac{\Delta TR}{\Delta Q}
  \]

<table>
<thead>
<tr>
<th>P</th>
<th>Q</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
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</table>

- Note for TR maximising output, the MR=0. Also note that the MR curve cuts the horizontal axis exactly halfway between the origin and where the AR curve or demand curve cuts the horizontal axis.
Short-run profits and losses

- In the short-run, the monopoly firm can make economic profits, normal profits or economic losses (refer back to Unit 1). It is possible but unlikely that a monopoly makes an economic loss.

<table>
<thead>
<tr>
<th>Q</th>
<th>P</th>
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<td>64</td>
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<td>-64</td>
</tr>
</tbody>
</table>

- The monopoly maximises profits when it produces 3 units, and makes a normal profit when it produces 5 units.
- Note that revenue maximising output (4) is not the same as the profit maximising output (3).

Long-run equilibrium

- In the long-run, a monopoly can make economic or normal profits only.
- Example of things changing is consumers’ tastes and that reduces the demand. This results in a fall in:
  - The price
  - The profit maximising output
  - The monopoly’s profit
- A long-run equilibrium only exists when there are no changes in the demand for the product or in the cost of production.

Comparison with perfect competition

<table>
<thead>
<tr>
<th>Perfect Competition</th>
<th>Monopoly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price taker</td>
<td>Price maker</td>
</tr>
<tr>
<td>Make economic profits or losses in the short run</td>
<td>Chooses to supply the quantity</td>
</tr>
<tr>
<td>No barriers to entry or exit</td>
<td>Complete barriers to entry</td>
</tr>
<tr>
<td>Productively efficient in the long run equilibrium</td>
<td>Make economic profits in the long run</td>
</tr>
<tr>
<td>Consumers pay lowest possible price</td>
<td>In the short run they might make economic losses</td>
</tr>
<tr>
<td>Price is equal to lowest possible AC</td>
<td>Not productively efficient when it is producing the profit maximising output</td>
</tr>
<tr>
<td>Society is making the most efficient use of its resources</td>
<td>AC are not at a minimum</td>
</tr>
<tr>
<td>Maximising the output that it produces from the factors of production</td>
<td>Firm is not making the most efficient use of society’s scarce resources</td>
</tr>
</tbody>
</table>
To summarise, in long-run equilibrium the monopoly industry produces less output at a higher price compared to the perfectly competitive market.

**TOPIC 2: IMPERFECT MARKET - OLIGOPOLY**

**OLIGOPOLY**

- **Oligopoly**: A market in which a small number of relatively large businesses supply most of or all the output in the market, e.g. oil industry, telecommunication industry, car industry, etc.

**Characteristics of an oligopoly**

- Limited competition – Only a few suppliers of the same product dominate the market.
- Interactivity – If one company makes a decision, it influence the decisions the other companies make.
- Price changes – They will more frequently change their prices in order to increase their market share.
- Cost advantage – They have an absolute cost advantage over the rest of the competitors.
- Joint decision making – It is a key instrument to make decisions together in order to dominate the market.
- Difficult entry – New firms will experience high barriers to enter.
- High profits – Abnormal high profits may be result of joint decisions.

**Interdependence**

- Another key characteristic of oligopoly firms is that they are interdependent.
- The decisions that an oligopoly firm makes with respect to quantity, marketing strategies and location, for example, depend largely on what it thinks the other firm in the industry will do in response to its actions.

**Collusion**

- Explicit collusion is usually illegal between firms within countries.
- However, firms are still tempted to practice implicit collusion. In other words, they act together to produce the profit maximising output but they do it in such a way that it is very difficult to prove that they have colluded.

**Non-price competition**

- Non-price competition includes the following:
  - Product differentiation: product is slightly different from the others.
  - Product proliferation: different range of products to cater for many different markets.
  - Advertising: oligopoly firms advertise their products heavily.
COMPETITION POLICIES

- Governments in many countries use competition policies to protect consumers and to promote the efficient use of resources.
- Remember the more competitive an industry, the lower the prices.
- Def. merger: occurs when 2 firms join together to form a single firm.
- Def. acquisition: occurs when one firm takes over another firm.
- In 1998 the Competition Act was passed. In terms of the Act, a Competition Commission and Competition Tribunal were established.
- Def. Competition Tribunal: this is a body that decides whether or not to approve recommendations of the Competition Commission.

SECTION C: HOMEWORK

TOPIC 1: IMPERFECT MARKET – MONOPOLY

QUESTION 1: 20 minutes (Source: Economics for all Grade 12)

1.1 Complete the following table:

<table>
<thead>
<tr>
<th>Price (R)</th>
<th>Quantity (Q)</th>
<th>Total revenue (TR)</th>
<th>Marginal revenue (MR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(20)

1.2 Name four characteristics of a monopoly. (8)

1.3 Explain profit maximisation. (4)

TOPIC 2: IMPERFECT MARKET - OLIGOPOLY

QUESTION 1: 16 minutes (Source: Economics for all Grade 12)

1.1 Name two examples of products that are oligopolies. (4)

1.2 Name the two types of collusions that take place amongst oligopolies. (4)

1.3 Explain a cartel. (6)

1.4 Explain non-price competition. (12)
TOPIC 1: IMPERFECT MARKET – MONOPOLY

QUESTION 1: 4 minutes  
(Taken from DoE Exemplar 2008)

- Faced with demand curves ✓✓
- Decide on their production levels ✓✓
- Exposed to market forces ✓✓
- Face substitutes / No close substitutes ✓✓
- Enjoy favourable circumstances ✓✓
- Exploit consumers ✓✓
- Are protected by barriers of entry ✓✓
- (Any other relevant facts) (3 x 2)[6]

QUESTION 2: 12 minutes  
(Taken from DoE Feb-March 2009)

2.1 A market situation where at least one of the conditions for perfect competition is not satisfied. ✓✓✓ (3)

2.2 Short-run ✓✓✓ (3)

2.3 The position of MC and MR where MC = MR ✓✓✓ (3)

2.4 R, a, b, C ✓✓✓ (3)

2.5 In a perfectly competitive market the AR = MR = P.
- A monopoly is confronted with a normal market demand curve which slopes downwards from left to right D = AR.
- Any point on the monopolist’s demand curve (D) is an indication of the quantity of the product that can be sold, and the price at which it will trade
- The MR curve runs below the demand curve with the exception of the first unit,
- TR increases at a diminishing rate up until a point and then starts to decrease.
- MR is always lower than AR
- The percentage increase in quantity demanded is greater than the % decrease in price at all points; therefore, the MR will always lower than AR (Any 3 x 2)(6)

2.6 Will decrease to equilibrium point k ✓✓ (2) [20]

QUESTION 3: 30 minutes  
(Taken from DoE Nov 2009)

INTRODUCTION

The major organisational features of a market, (e.g. number of sellers/buyers the degree of product differentiation/the availability of information) are called the structure of the market. ✓✓✓

OR

Is a market structure in which there is only ONE seller of a good or service that has no close substitutes, entry into that market is completely blocked. ✓✓✓ (Max. 3)
BODY

MONOPOLY AS MARKET STRUCTURE

Number of firms ✓ ✓
- Whereas a perfectly competitive industry consists of a large number of small firms, the monopoly consists out of one single firm. ✓ ✓
- The monopoly is also the industry. ✓ ✓
- Example: Eskom ✓ or De Beers – diamond-selling ✓ ✓
  (Accept any other relevant example) ✓ ✓
- In the perfect market there is a large number of firms ✓ ✓

Nature of product ✓ ✓
- The product is unique with no close substitute. ✓ ✓
- Example: Diamonds are unique. ✓ ✓
- In the perfect market products sold are homogeneous. ✓ ✓

Market entry ✓ ✓
- Refers to how easy or difficult it is for businesses to enter or to leave the market ✓ ✓
- Is entirely/completely blocked. ✓ ✓
- A number of barriers to entry that may give rise to monopoly can be:
  - Economies of scale ✓ ✓
  - Limited size of the market ✓ ✓
  - Exclusive ownership of raw materials ✓ ✓
  - Patents ✓ ✓
  - Licensing ✓ ✓
  - Sole rights ✓ ✓
  - Import restrictions ✓ ✓
- In the perfect market, there is complete freedom of entry and exit ✓ ✓

Market Information ✓ ✓
- This refers to market participant’s information on market conditions. ✓ ✓
- All information on market conditions should be available to both buyers and sellers. ✓ ✓
- This means that there are no uncertainties. ✓ ✓
- This assumption also applies in the case of the monopoly. ✓ ✓
- In the perfect market both sellers and buyers have full knowledge of all prevailing market conditions ✓ ✓

Control over price ✓ ✓
- A perfectly competitive business has no control over the price of its product and is, therefore, a price-taker. ✓ ✓
- In the case of a monopoly there are considerable price controls, but limited by market demand and the goal of profit maximisation. ✓ ✓
- In the perfect market no individual buyer or seller is able to influence the market price ✓ ✓

Demand curve for the firm’s product ✓ ✓
- It equals the market demand curve ✓ ✓
- Downward-sloping from left to right ✓ ✓
- In the perfect market, the market demand curve slopes downwards from left to right, but the individual business cannot influence the market price, and its demand curve is the actual market price taken – horizontal to the quantity axis ✓ ✓
Long-run economic profit ✓ ✓
- Can be positive ✓ ✓
- Because new entries are blocked and short-run economic profit; therefore, cannot be reduced by new competing firms entering the industry ✓ ✓
- The monopoly can thus continue to earn economic profit as long as the demand for its product remains intact ✓ ✓
- In the perfect market economic profit does not exist on the long run ✓ ✓

Any 5 x 6 (30) – discussion on monopoly
Any 5 x 2 (10) – for comparison to perfect market
A maximum of 12 marks can be allocated for graphs – 28 marks for discussion

CONCLUSION
From the above it is clear that healthy competition contributes to a well-functioning market structure. ✓ ✓

QUESTION 4: 5 minutes
(Taken from DoE Nov 2010)

![Diagram of Price/Cost, MC, AC, MR, AR = D, Price/Cost, Quantity, Economic profit, P1, c, d, e, f, o, Q1]

Labelling of axes = 2 marks
Labelling of curves = 4 marks
Indicating economic profit = 2 marks
TOTAL = 8 MARKS
TOPIC 2: IMPERFECT MARKET - Oligopoly

QUESTION 1: 10 minutes  (Taken from DoE Exemplar 2008)

- Type of product ✓✓ homogeneous (pure oligopoly) or differentiated (differentiated oligopoly) ✓✓
- Entry ✓✓ new producers have free entry although not easily illustrated - only few businesses in market ✓✓
- Control over prices ✓✓ producers generally have considerable control over price of products ✓✓
- Mutual dependence ✓✓ only few businesses – influenced by others’ actions – competitors react ✓✓

(Any other relevant facts) (4 x 4) [16]

QUESTION 2: 4 minutes  (Taken from DoE Nov 2008)

- Product recognition and differentiation ✓✓
- Extended shopping and business hours ✓✓
- Doing business over the internet ✓✓
- After-sales service ✓✓
- Offering additional services (free travel insurance by banks) ✓✓
- Loyalty rewards for customers ✓✓
- Door-to-door deliveries ✓✓
- Building brand loyalty ✓✓
- Advertisements ✓✓

(Accept any other relevant forms from an approved source) (Any 3 x 2) [6]

QUESTION 3: 10 minutes  (Taken from DoE Nov 2008)

- Explicit collusion ✓✓ is usually illegal between firms within countries. ✓✓
- However, firms are still tempted to practise implicit collusion ✓✓. In other words, they act together to produce the profit maximising output but they do it in such a way that it is very difficult to prove that they have colluded. ✓✓

[8]

QUESTION 4: 6 minutes  (Taken from DoE Nov 2010)

4.1 • Increase efficiency in the market ✓✓
• Improve equity in the markets ✓✓
• Contribute to developmental objectives ✓✓
• Prevent monopoly power / abuse of economic power ✓✓
• Regulate growth of acquisitions (takeovers) and mergers ✓✓
• Prevent restrictive practices ✓✓
• Promote competition ✓✓
• Exploit advantages of scale to benefit society in general ✓✓
• Eliminate price fixing ✓✓

(Accept any other relevant response) (Any 2 x 2) (4)
4.2 Grant the order / confirm the penalty (order) imposed on the company by the Competition Commission. ✓✓✓ (3)

4.3 Competition Appeal Court. ✓✓✓ (3)

QUESTION 5: 5 minutes (Taken from DoE Nov 2010)

- Oligopolists do not compete with each other on price because price wars will not benefit them. ✓✓
- Prices are determined by mutual agreement. ✓✓
- They compete with each other on product differentiation and efficient service. ✓✓
- Convenience shopping ✓✓
- E.g. extended shopping hours ✓✓
- Firms make use of advertisements to increase awareness and to lure customers towards their products. ✓✓
- E.g. Pick ’n Pay use extensive advertising to increase market share. ✓✓
- Non-price competition builds brand loyalty and product recognition. ✓✓
- E.g. after sales service, loyalty rewards. ✓✓

(Accept examples for maximum of 2 marks) (Any 4 x 2) [8]
TOPIC 1: MARKET FAILURE

Learner Note: Market failure occurs when the market fails to achieve technical efficiency or allocative efficiency. Remember the production possibilities curve you have done in Grade 10.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 30 minutes (Taken from DoE Exemplar 2008)

A monopoly is a good example of a market where profit maximisation implies under provisioning and overcharging of goods and services. This type of market is usually an unregulated market that fails to produce an ideal state of affairs.

Write an essay explaining in detail the reasons for market failures. [50]

QUESTION 2: 12 minutes (Taken from DoE Nov. 2008)

Study the graphs below and answer the questions that follow.

2.1 Define the concept externality. (3)
2.2 Which ONE of the above graphs indicates a negative externality? (3)
2.3 Give TWO examples of positive externalities. (2)
2.4 Which demand curve in GRAPH B represents the social benefit? (2)
2.5 Explain the impact of positive externalities on costs/prices and quantities of goods. Referto the relevant graph above. (6)

QUESTION 3: 10 minutes (Taken from DoE Feb/March 2009)

Discuss merit and demerit goods as a reason for market failures. [16]
QUESTION 4: 4 minutes  
(Taken from DoE Nov. 2009)

List any THREE examples of negative externalities caused by industrial development.  
(3 x 2) [6]

TOPIC 2: COST BENEFIT ANALYSIS

Learner Note: The main purpose of cost-benefit analysis is to assist us in deciding how to use our scarce resources.

QUESTION 1: 12 minutes  
(Taken from DoE Feb/March 2009)

Study the table below and answer the questions that follow.

COST AND BENEFITS IN THE SUPPLY OF CLEAN WATER TO A COMMUNITY

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>Economics Costs</th>
<th>Economic Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1 000 000</td>
<td>500 000</td>
</tr>
<tr>
<td>B</td>
<td>1 500 000</td>
<td>2 000 000</td>
</tr>
<tr>
<td>C</td>
<td>1 200 000</td>
<td>2 000 000</td>
</tr>
<tr>
<td>D</td>
<td>800 000</td>
<td>100 000</td>
</tr>
</tbody>
</table>

1.1 Define the term cost-benefit analysis.  
(3)

1.2 Use the information in the above table, draw a well-labelled bar graph indicating cost and benefits for each alternative:
Vertical axis: Costs R (million). Scale: 1 cm = 200 000
Horizontal axis: alternatives  
(8)

1.3 Calculate the cost-benefit ratio of A and B by using the following formula:

\[ \text{BCR}_{A(B)} = \frac{\text{Present value of economic benefits}}{\text{Present value of economic costs}} \]

Which alternative should the community adopt?  
(5)

1.4 Draw a comparison between a cost-benefit analysis done by government and the private sector.  
(4) [20]
SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: MARKET FAILURE

CAUSES (REASONS) OF MARKET FAILURES

<table>
<thead>
<tr>
<th>Market failures</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative and positive</td>
<td>When price and output decisions are made in the market, only private</td>
</tr>
<tr>
<td>externalities</td>
<td>costs and benefits are taken into account.</td>
</tr>
<tr>
<td>Public goods</td>
<td>Because of the non-excludability and non-rivalness of public goods,</td>
</tr>
<tr>
<td></td>
<td>the market is not willing to supply these goods.</td>
</tr>
<tr>
<td>Merit and demerit</td>
<td>Although the market is willing to supply these goods, the market</td>
</tr>
<tr>
<td>goods</td>
<td>either supplies too little (in the case of merit goods) or too much</td>
</tr>
<tr>
<td></td>
<td>(in the case of demerit goods).</td>
</tr>
<tr>
<td>Imperfect market</td>
<td>An imperfect market structure causes prices to be higher and output</td>
</tr>
<tr>
<td>structure</td>
<td>to be lower than under perfect competition, and a technical</td>
</tr>
<tr>
<td></td>
<td>inefficiency of production occurs as a result of the absence of</td>
</tr>
<tr>
<td></td>
<td>competition.</td>
</tr>
<tr>
<td>Lack of information</td>
<td>For markets to function efficiently information is required. Where</td>
</tr>
<tr>
<td></td>
<td>there is a lack of information the wrong decisions are made.</td>
</tr>
<tr>
<td>Immobility of factors of</td>
<td>For markets to function efficiently factors of production need to be</td>
</tr>
<tr>
<td>production</td>
<td>mobile to adapt to changes in demand and technology. In general,</td>
</tr>
<tr>
<td></td>
<td>factors of production tend to be immobile.</td>
</tr>
<tr>
<td>Unequal distribution of</td>
<td>The distribution of income and wealth determines for whom goods and</td>
</tr>
<tr>
<td>income</td>
<td>services are produced. Markets tend to distribute income unequally.</td>
</tr>
</tbody>
</table>

Source: Economics for all p138

Externalities

- An externality occurs when some of the costs and benefits of a decision or action are borne or enjoyed by second or third parties that were not part of or directly involved in the decision making.
- Externalities are also called third party effects, side effects, spillover effects or neighbourhood effects.
- To understand externalities one has to understand four basic costs and benefit concepts:
  - Private costs – internal costs. The usual costs that consumers incur when they buy goods, e.g. price of bicycle R990, but that includes costs of producing the bicycle like tyres, overheads, etc.
  - Private benefits – internal benefits. Those benefits that accrue to those who buy the goods, and those who produce the goods.
  - Social costs – this is the cost of goods or services to those who create them and the society at large. Private costs plus external cost are equal to social costs.
  - Social benefits – positive externalities. For instance, municipalities provide clean water, for which consumers pay. Private benefits plus external benefits are equal to social benefits.
- Externalities are activities that exist if there is a difference between net social cost and net private costs.
- If net social costs exceed net private cost, than a negative externality is said to exist.
- If the net social benefits exceed net private benefits, than a positive externality exits.
- Negative externalities:

  - Pollution is an example of a negative externality.
  - Another example of negative externality is the cost imposed on society by the use of motor cars. This includes air & noise pollution, accidents, congestion and damage to roads.

- Positive externalities:

  - A positive externality occurs when a benefit is derived by a second or third party from the action or decision of another party.
Public goods

- Definition of public goods, also called collective or social goods: goods and services which, if they are provided to all, are open to be used by all members of society.
- Community goods – defense, police services, street lights, flood control, etc.
- Collective goods – parks, beaches, streets, public transport, etc.
- Public goods have 2 features:
  - Non-rivalry – this means that one person’s enjoyment of goods does not reduce another person’s enjoyment them, e.g. lighthouse.
  - Non-excludable – people who are not willing to pay for goods cannot be excluded from enjoying them. They are known as free-riders. For example, TV and radio have many free-riders in SA.
- Free-rider: A problem intrinsic to public goods – because people can enjoy the benefits of public goods whether they pay for them or not, they are usually unwilling to pay for them.
- The provision of public goods is in the hands of government; the production of these goods might be done by firms in the private sector but this does not mean they are private goods.
- In SA, most goods and services in the economy are private goods. They have rivalry in consumption and excludability, e.g. if one learner consumes a chocolate, another is excluded from having it.

Merit and demerit goods

- Merit and demerit goods relate to desirability of use.
- **Merit goods**: beneficial goods to society that all individuals should be able to receive or consume, irrespective of their income (positive externalities).
- **Demerit goods**: goods such as drugs that may be socially harmful to society (negative externalities).
- Free market systems always under-produce merit goods; in addition government will provide them, even if it is only partly.
- Examples of merit goods are education, health care, etc.
- Examples of demerit goods are cigarettes, alcohol, etc.
- Government can ban demerit goods or reduce consumption by means of taxation.

Imperfect competition

- In market economies, competition is often impaired by power.
- Most businesses operate under conditions of imperfect competition that allows them to restrict output, raise prices and produce where price exceeds marginal costs.
- They can also prevent new businesses from entering the market.
Lack of information

- Information received or given to households and businesses may be incomplete, which can result in mistakes.
- In the presence of imperfect information, not all exchanges are efficient.
- Advertisements can also play an important role in imperfect information.
- Another cause of market failure because of the lack of information, is asymmetric information – a situation in which economic agents do not all have the same information. This is a common problem in the markets for second-hand goods, from houses to cars.

Immobility of the factors of production

- Markets may not respond to changes in consumer demand if resources cannot move around easily.
- Resources are not very mobile at the best of times, so most markets do not adjust rapidly to changes in supply and demand.
- Labour may take time to move from one job or place to another, and the same with physical capital.

Imperfect distribution of income and wealth

- Free markets tend to generate an unequal distribution of income and wealth; free market systems reward certain participants better than others.
- This is caused by number of factors:
  - A difference in market power
  - The initial distribution of wealth
  - Unequal access to markets and educational opportunities
  - Discrimination

CONSEQUENCES (EFFECTS) OF MARKET FAILURES

- Market failure occurs when markets do not achieve technical and allocative efficiency.
- In general, the Government can deal with market failure in 2 ways:
  - It can use taxes and subsidies
  - It can regulate the production or consumption of output
- Let us consider in more detail how Government can intervene:

Externalities

- In the case of pollution, Government might choose one of the 3 approaches illustrated below:
  - Government could tax the output from the producer
  - Government could tax the pollution itself
  - Government could use regulation
Merit and demit goods

- In the case of merit goods where a higher consumption of the good is regarded as good for society, the government makes use of subsidies.
- In the case of demerit goods, such as cigarettes, the government imposes taxes to discourage consumption.
- Government also uses legislation to ban smoking in public places.
- **Excise duty:** a tax that is a fixed amount payable per unit of output, e.g. in SA today, alcohol, tobacco and petrol all carry excise duties. Excise duties are usually levied on goods where the demand is price inelastic.
- **Incidence of tax:** refers to who pays the tax.

Public goods

- Since the market is not willing to supply public goods, it is up to the government to ensure that these goods are supplied.
- Government does this by using tax.

Imperfect competition

- Government can deal with the effects of imperfect competition by:
  - Taxing the firms’ economic profits
  - Imposing price controls
  - Introducing a competition between the firms.

Lack of information

- Government deals with problems of imperfect information by means of regulations designed to ensure greater access to information.
- E.g. Government can require firms to disclose information about their operations.
- The SABS also fulfills such a function in SA.

Distribution of income and wealth

- An important instrument in the hands of the government is the national budget. Through its taxing and spending powers Government can try to change the distribution of income by:
  - Subsidising goods and services
  - Transferring income directly to poor households
  - Providing certain goods and services free of charge
  - Implementing job-creation programmes
- In SA we also have a progressive tax system - the more people earn the more tax they pay.

The Gini co-efficient measures how evenly the income of a country is distributed among the population (A co-efficient close to 0 shows fairly even distribution; a co-efficient close to 1 show uneven distribution.)
TOPIC 2: COST BENEFIT ANALYSIS

COST-BENEFIT ANALYSIS

- Cost-benefit analysis (CBA) is a standard method used to compare the social cost and benefits of alternative projects or investments.
- Cost and benefits are measured and then weighed up against each other in order to generate criteria for decision-making.
- We use one of 3 decision criteria:

<table>
<thead>
<tr>
<th>Net present value (NPV)</th>
<th>Internal rate of return (IRR)</th>
<th>Benefit-cost ratio (BCR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The present value of an investment project, found by discounting all present and future receipts and outgoings at an appropriate rate of interest; if the net present value calculated is positive, it is worthwhile investing in a project.</td>
<td>The interest rate at which the net present value of a project is zero (0); a project is worth investing in if its IRR is greater than the rate of interest.</td>
<td>The BCR for a project is the ratio between the sum of expected benefits and its cost.</td>
</tr>
</tbody>
</table>

- CBA is, in essence, an accounting procedure for investment whereby the total cost of the particular project is weighted against its total benefits. Government usually uses CBA to see whether they should undertake a certain project.

Rationale

- This includes understanding the rate of return on a project and the idea that future costs and benefits can be discounted in reverse to give its present value.

Price mechanisms

- The procedure involves estimating the money equivalent of the benefits of a project and comparing these benefits’ estimates with the cost of providing the goods or services.
- It is relatively easy to measure private costs and benefits as they go through the price mechanism.
- But in practice, it is more difficult to attach monetary values to external costs and benefits.
- One way is by using shadow prices, based on opportunity costs.
- Definition of shadow prices: Relative prices of goods, services and resources that are proportional to their true opportunity cost for the economy, taking account of any external economies and diseconomies.
- E.g. to place a value on the benefits drivers would receive on completion of a new freeway, we could estimate the driving time that would be saved, and then multiply this by the average wage rate.
- Money now is worth more than money later.
- The relative levels of costs and benefits, as well as the distribution of these, must be considered. For example, a project should go ahead if the investors (those who gain) can compensate those who lose, and still experience a net gain.
The cost-benefit ratio (CBR) of a specific programme may be defined as the:

\[
CBR = \frac{\text{Sum of annual benefits over the useful life of the programme discounted to the present value}}{\text{Sum of all annual costs, including maintenance discounted to the present value}}
\]

**Application**

- The calculation of a CBR is often the end result of the study.
- The numerator of this ratio is defined as the present value of all of the expected economic benefits attributable to a proposed undertaking.
- E.g. to calculate the monetary value for a public park or an art museum, shadow prices (benefits) may be used to calculate the value of the enjoyment of these facilities.
- The denominator of the CBR is defined as the present value of the cost of undertaking and operating the project. If it is a large capital investment project, there are 2 types of costs: capital cost and operation, maintenance and repair cost.
- Capital costs occur before the project begins to produce outputs; the remaining costs are future expenses.
- On the basis of these definitions, the CBR is defined as the value of benefits of a programme to the value of the programme’s cost:

\[
CBR = \frac{\text{Present value of economic benefits}}{\text{Present value of economic costs}}
\]

- If the ratio is greater than 1, the project is judged economically worthwhile.
- If the ratio is equal to 1, public expenditure adds nothing.
- If the ratio is below 1, it detracts from economic well-being.

**The uses of the CBA in practice**

- In practice, a CBA tries to answer the question: ‘Do the gains to the people exceed the sacrifices required of them?’
- If the answer is yes – CBA > 1
- If no – CBA < 1
SECTION C: HOMEWORK

TOPIC 1: MARKET FAILURE

QUESTION 1: 17 minutes  
(Source: The Answer Series)

Tabulate 7 reasons and explain each one, for market failure.  

[top] [28]

TOPIC 2: COST BENEFIT ANALYSIS

QUESTION 1: 16 minutes  
(Source: The Answer Series)

1. Before building a school, the government will do a CBA. Answer the questions that follow, related to this project.
   1.1 Describe the process that economists use to conduct a cost-benefit analysis.  
   (10)
   1.2 List three items under costs that will need to be measured.  
   (6)
   1.3 List three items under benefits that will need to be measured.  
   (6)
   1.4 Show the programme calculation used to calculate CBA.  
   (4)
   [26]

SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: MARKET FAILURE

QUESTION 1: 30 minutes  
(Taken from DoE Exemplar 2008)

INTRODUCTION

- Sometimes free markets fail to produce quantities of goods and services that people want at prices that reflect marginal utilities and relative scarcities – known as market failure ✓✓✓
- Market failure means that best available or optimal production outcome has not been achieved – failure of markets to achieve optimum resource allocation ✓✓✓ (Max. 3)
BODY
REASONS:
1. **Externalities ✓✓**
   - Sometimes in ideal market conditions some people gain or others suffer due to prevailing of externalities ✓✓
   - Are costs and benefits that convert private costs and benefits to social costs and benefits ✓✓
   - 4 concepts:
     - Private costs (internal costs) ✓✓ costs consumers incur when buying goods, e.g. price of bicycle of R990 ✓✓
     - Private (internal) benefits ✓✓ benefits of those who buy and produce goods, like joy to the consumer or profit for the producer ✓✓
     - Social costs ✓✓ cost to producers and society at large – includes additional costs like disposing waste products, decreasing appeal of area ✓✓
     - Social benefits ✓✓ positive externalities like clean water leading to few illnesses, healthier workforce, and higher productivity ✓✓
   - Private costs and benefits have price – externalities do not have a price – is cost or benefit to third parties ✓✓
   - Externalities are difference between social costs and benefits and private costs and benefits ✓✓

2. **Public goods ✓✓**
   - Markets incomplete – do not meet demand for certain goods – public sector provides these goods known as public goods, divided into community (water drainage and light houses) and collective goods (parks, pavements) ✓✓
   - Features of public goods:
     - Non-rivalry ✓✓ consumption by one person does not reduce consumption by another individual, e.g. lighthouse ✓✓
     - Non-excludability ✓✓ consumption of public goods cannot be confined to those who pay for them (free riders, e.g. radio and television licenses) ✓✓
     - Social benefits outstrip private benefits ✓✓ large social benefits relative to private benefits, e.g. health care and education ✓✓
     - Infinite consumption ✓✓ once provided, marginal cost of supplying one more individual is zero (traffic lights) ✓✓
     - Non-reject ability ✓✓ individuals may not be able to abstain from consuming them even if they want to (e.g. street lighting) ✓✓
   - Public goods not provided by price mechanism – producer cannot withhold goods for non-payment ✓✓
   - State finance public goods through taxation and provide it themselves ✓✓
   - In SA – most goods and services private goods – have rivalry in consumption and excludability ✓✓
3. Merit and demerit goods

MERIT GOODS:
- Some goods highly desirable for general welfare – not highly rated by market – leads to too little consumed – market failed
- E.g. health care and education, safety – merit goods – special form of private goods
- Few people would pay for education if they had to meet full cost – results in market failure
- In pure market system – consumers’ spending on merit goods determined by private benefits
- Merit goods have positive externalities – social benefits derived from their consumption exceed private benefits
- Common method to overcome eminent market failure – for state to provide them
- Options:
  - provide them in part (focus on primary health care and education in general)
  - Statutory requirements (youth compelled to stay in school until age of 15)
  - Outsourcing: contract private sector to provide some merit goods (some education and training and health care services)

DEMERIT GOODS:
- E.g. cigarettes, alcohol and non-prescription drugs – over-consumed
- Consumer unaware of true cost of consuming them = negative externalities
- Government can ban their consumption or reduce it through taxation and provide information about their harmful effects

4. Imperfect competition

- Competition often impaired by power in market economies – power lies with producers
- Conditions of imperfect competition: restrict output, raise prices where price exceeds marginal cost, prevent new businesses from entering, prevent full adjustment to changes in demand
- Modern market does not allow for price negotiations
- Advertising promotes producer sovereignty – encourages consumer to buy products – delays products from market until they are in businesses’ financial interest
- E.g. businesses had technology to produce long-life light bulbs, allows cars to be driven by fuels other than fossil fuels, cure for common cold

5. Lack of information

- Lack of information to make rational decisions
- Consumers maximise their utility – need detailed information – technology increases information
- Workers unaware of job opportunities, advantages and disadvantages, health risks of current jobs
- Entrepreneurs lack of information about costs, availability and productivity of some factors of production – operating on basis of incorrect info about reliability and life span of machines in use
6. **Immobility of factors of production**
   - Most markets do not adjust rapidly to changes in supply and demand – due to lack of information, resources not mobile.
   - Labour takes time to move occupationally and geographically – adjust slowly and inadequately.
   - Unskilled workers not able or willing, or have no time to gain necessary skills.
   - Physical capital infrastructure like telephone lines – can move from one location to another at irregular intervals.
   - Structural changes occur slowly – demand increases or decreases – technology used like robots – takes time for labour-intensive textile production to be switched to computer assisted production.

7. **Imperfect distribution of income and wealth**
   - Market system neutral to issue of income distribution
   - Discrimination distorts earnings of women, minority groups and disabled persons and those subject to illnesses and incapacity. (Max. 40)

**CONCLUSION**
Any suitable conclusion. NOT a repetition of any facts from above. (Max. 2)

**QUESTION 2:** 12 minutes

(Taken from DoE Nov. 2008)

2.1 Externalities are benefits or costs resulting from the production of goods that are not reflected in the price.
   Accept any other definition from an approved source

2.2 Graph A

2.3 • Pollination of fruit trees by bees
   • Public enjoyment of views of private buildings
   • Flu injections affect those who do not pay for inoculation.
   • Accept any other relevant example (Any 2 x 3)

2.4 D1D1 / D1

2.5 DD represents the demand from individuals, i.e. the **private benefits** gained from purchasing particular goods or services, and SS represents the **direct cost** of providing those goods or services. The **market equilibrium** is given where So and Do intersect. If it were possible to quantify the **external benefit** associated with the provision of these goods or services, the social benefit accruing to society could be represented by D1D1 / D1. If the external benefit were to be taken into account, the **equilibrium** would be with output Q1 selling at P1.
   Accept any relevant example

Accept any relevant example

(3 x 2) (6)
QUESTION 3: 10 minutes

(Taken from DoE Feb/March 2009)

Merit goods:
1. Goods **highly desirable** for general welfare but not **highly rated** by the market ✓✓
2. If people had to **pay market prices** for them relatively **too little would be consumed** – the market will fail ✓ ✓
3. E.g. health care, education, radio and TV-broadcasting, skills training, safety, inoculations and car seat belts ✓✓
4. Is a **special form** of private goods, because few people would pay for education if they had to **meet the full cost** ✓✓
5. The **reason for undersupply** of merit goods is that the market only takes the private costs and benefits into account and not the social costs and benefits ✓✓

(Demerit goods:
1. Regarded as socially **harmful** for consumption ✓✓
2. Governments often take steps to **discourage consumption** and ban use of demerit goods ✓✓
3. While the market is willing to supply demerit goods, it tends to **oversupply** demerit goods ✓✓
4. E.g. addictive drugs, tobacco, alcohol and gambling ✓✓
5. These items may be taxed to reduce consumption or may be banned ✓✓
   Some consumers may be unaware of the true cost of consuming them, i.e. their negative externalities / demerit goods are regarded as bad for us and we should use less of these goods ✓✓

(Any 4 x 2) [16]

QUESTION 4: 4 minutes

(Taken from DoE Nov. 2009)

- Air pollution ✓ ✓
- Water pollution ✓✓
- Noise pollution ✓ ✓
- Environmental / Land pollution / Light pollution ✓ ✓
- Global warming ✓ ✓
- Social illnesses ✓ ✓
- Traffic increases / congestion / Road damages ✓ ✓
- Habitats of plants and animals are destroyed / environmental degradation / less land available for agriculture ✓ ✓
- Informal settlements / squatting / overpopulation ✓ ✓
- Housing resettlement ✓ ✓
- Blockages of routes ✓ ✓

(Any 3 x 2) [6]

TOPIC 2: COST BENEFIT ANALYSIS

QUESTION 1: 12 minutes

(Taken from DoE Feb/March 2009)

1.1 A technique for enumerating and evaluating the total social cost and total social benefits associated with an economic project. ✓ ✓ ✓

OR

It is a standard method used to compare the social costs and benefits of alternative projects or investments. ✓ ✓ ✓

(3)
1.2

The SSIP is supported by

1.3  \( \text{BCR}_A = \text{Present value of economic benefits} \)

\[ \text{Present value of economic costs} = \frac{500 000}{1 000 000} = 0.5 \]

\( \text{BCR}_B = \frac{2 000 000}{1 500 000} = 1.33 \)

Alternative B

1.5 • In the private sector a comparison needs to be made between the expected private cost and benefits over the estimated time span of a new project.

• In the public sector a comparison needs to be made between the expected social cost and benefits over the estimated time span of a new project.
TOPIC 1: ECONOMIC GROWTH AND DEVELOPMENT

**Learner Note:** GDP is defined as the total market value of all final goods and services produced within the boundaries of a country in a particular period of time.

SECTION A: TYPICAL EXAM QUESTIONS

**QUESTION 1:** 30 minutes  
(Taken from DoE Exemplar 2008)
Analyse the information in the table below and evaluate South Africa’s growth and development policies in terms of international best practice in a formal letter to the Minister of Finance.  

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>1994</th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP (% increase)</td>
<td>3.2</td>
<td>4.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Real per capita GDP (% increase)</td>
<td>1.1</td>
<td>2.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Inflation: CPI (%)</td>
<td>9.0</td>
<td>5.3</td>
<td>3.4</td>
</tr>
<tr>
<td>CPIX (%)</td>
<td>7.8</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Employment (% increase)</td>
<td>0.4</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Exchange rate: rand per US$</td>
<td>3.55</td>
<td>6.94</td>
<td>6.36</td>
</tr>
<tr>
<td>Reserves (% GDP)</td>
<td>3.1</td>
<td>9.1</td>
<td>18.7</td>
</tr>
<tr>
<td>Repo rate (% end of year)</td>
<td>13.0</td>
<td>12.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Budget deficit as % of GDP</td>
<td>5.1</td>
<td>2.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

**QUESTION 2:** 10 minutes  
(Taken from DoE Nov. 2008)
Compare South Africa’s growth policies in terms of international benchmarks. (4 x 4)  

**QUESTION 3:** 5 minutes  
(Taken from DoE Nov. 2010)
Discuss the difference between economic growth and economic development.  

TOPIC 2: NORTH-SOUTH DIVIDE

**Learner Note:** This is the economic and human divide that exists between the developed and developing countries.

**QUESTION 1:** 10 minutes  
(Taken from DoE Exemplar 2008)
Tabulate the major differences between the developed countries in the North and the developing countries in the South (North-South divide).  

**QUESTION 2:** 4 minutes  
(Taken from DoE Nov. 2008)
List any THREE characteristics of developing countries. (3 x 2)  

**QUESTION 3:** 4 minutes  
(Taken from DoE Nov 2009)
List any THREE reasons why the countries in the Northern Hemisphere are more developed than those in the Southern Hemisphere. (3 x 2)
QUESTION 4: 4 minutes (Taken from DoE Feb-March 2010)

Give any THREE reasons for the unequal standard of living between the developed and developing countries. (3 x 2) [6]

QUESTION 5: 6 minutes (Taken from DoE Nov. 2010)

5.1 Briefly explain the North-South divide as illustrated in the above cartoon. (4)
5.2 Explain the negative effects of globalisation on South Africa. (6)

[10]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: ECONOMIC GROWTH AND DEVELOPMENT

Introduction

- Economic growth and development affect each one of us. The two concepts are closely linked.
- Economic growth takes place when a country’s production and consumption of goods and services increase.
- If the goods and services produced are of the right kind and benefit the people of a country, their quality of life improves and economic benefit takes place.
- The term standard of living is the amount of goods and services that people consume, and this is a function of their income.
- Economic growth does not always lead to economic development.
Economic growth and development

<table>
<thead>
<tr>
<th>We saw that economic growth:</th>
<th>Economic development:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• takes place when a country produces and consumes more goods and services than before.</td>
<td>• is a broader concept than economic growth.</td>
</tr>
<tr>
<td>• is usually measured as the percentage change in real GDP.</td>
<td>• is concerned with human development.</td>
</tr>
<tr>
<td>• is a necessary condition for economic development to take place, but there is no guarantee that economic growth will ultimately lead to economic development.</td>
<td>• deals with issues such as employment, education, health and environmental sustainability.</td>
</tr>
<tr>
<td></td>
<td>• requires more than just the production of more goods and services.</td>
</tr>
<tr>
<td></td>
<td>• to take place, the fruits of economic progress must lead to an improvement in the living standards of the majority of people.</td>
</tr>
</tbody>
</table>

Source: Economics for all p153

- The goal of economic growth is to increase the production and consumption of goods and services.
- The goals of economic development are:
  - To increase the standard of living of a country’s inhabitants and ensure that their basic needs are met.
  - To create and environment in which people’s dignity, self esteem and self-respect are promoted.
  - To increase people’s freedom of choice by providing them with the opportunities to live a full life.
- South Africa’s policies:
  - The RDP – the ANC adopted the RDP as their development strategy in 1994.
  - GEAR – this policy was introduced to promote economic growth.

Economic growth and development in South Africa

- The economic growth record for the South African economy is given in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-64</td>
<td>5.66</td>
</tr>
<tr>
<td>1965-69</td>
<td>5.32</td>
</tr>
<tr>
<td>1970-74</td>
<td>4.38</td>
</tr>
<tr>
<td>1975-79</td>
<td>2.12</td>
</tr>
<tr>
<td>1980-84</td>
<td>2.98</td>
</tr>
<tr>
<td>1985-89</td>
<td>1.5</td>
</tr>
<tr>
<td>1990-94</td>
<td>0.2</td>
</tr>
<tr>
<td>1995-99</td>
<td>2.58</td>
</tr>
<tr>
<td>2000-04</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Source: South African Reserve Bank, Quarterly Bulletin, various issues

- According to the data in the above table, the economic growth performance of the South African economy has deteriorated significantly since the 1960’s.
- This had an important effect on the living standards of the average South African. See following page.
- The negative economic growth rate, seen in the table on following page, means that the volume of production in that particular year was lower than the previous year. The period since 1994 has been characterised by two important developments:
  - The political democratisation of South Africa
  - Economic globalisation
ECONOMICS
GRADE 12
SESSION 6
(LEARNER NOTES)

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP</th>
<th>Real GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0.3</td>
<td>-2.4</td>
</tr>
<tr>
<td>1991</td>
<td>1.0</td>
<td>-3.1</td>
</tr>
<tr>
<td>1992</td>
<td>-2.1</td>
<td>-4.2</td>
</tr>
<tr>
<td>1993</td>
<td>1.2</td>
<td>-0.9</td>
</tr>
<tr>
<td>1994</td>
<td>3.2</td>
<td>1.1</td>
</tr>
<tr>
<td>1995</td>
<td>3.1</td>
<td>1.0</td>
</tr>
<tr>
<td>1996</td>
<td>4.3</td>
<td>2.1</td>
</tr>
<tr>
<td>1997</td>
<td>2.6</td>
<td>0.5</td>
</tr>
<tr>
<td>1998</td>
<td>0.5</td>
<td>-1.6</td>
</tr>
<tr>
<td>1999</td>
<td>2.4</td>
<td>0.2</td>
</tr>
<tr>
<td>2000</td>
<td>4.2</td>
<td>2.1</td>
</tr>
<tr>
<td>2001</td>
<td>2.7</td>
<td>0.7</td>
</tr>
<tr>
<td>2002</td>
<td>3.6</td>
<td>1.6</td>
</tr>
<tr>
<td>2003</td>
<td>2.8</td>
<td>0.8</td>
</tr>
<tr>
<td>2004</td>
<td>3.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Source: *South African Reserve Bank, Quarterly Bulletin, March 2005*

- Economic globalisation: the integration of the South African economy in the international economy.
- Measuring growth performance of a country is easier than measuring its economic development.
- One way of measuring economic development is through the Human Development Index, compiled by the United Nations.
- The index measures the following three basic dimensions of human development:
  - A long and healthy life
  - Knowledge, through the adult literacy rate
  - A decent standard of living, using GDP

*Note of interest*: For the period 1970-1975, the life expectancy at birth in South Africa was 53.7 years. For the period 2000-2005 this figure fell to 49 years. This decline can be attributed to the HIV/AIDS epidemic. We thus need higher economic growth rates to improve the standard of living.

Growth policies

- The achievement of a high rate of economic growth is 1 of the 5 macro-economic objectives pursued by the government.
- The other objectives are:
  - High levels of employment
  - Price stability
  - Exchange rate stability
  - Economic equity
• Growth enables a community to consume more private goods and services. Furthermore, it contributes (through taxation) to the provision of social goods and services such as infrastructure, education, etc.
• In 2006 Government introduced ASGISA to help promote a number of strategies.
• Economic growth is a function of the following:
  o Improvements in technology
  o Increases in productivity
  o Increases in factors of production
  o Effective government policies and efficient administration
  o Investment
• Investment is central to economic growth.

Development policies

• Developing countries need policies to promote macro-economic objectives, but they also need to achieve other outcomes.
• Characteristics of developing countries suggest these other outcomes:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Desired outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low standard of living</td>
<td>Increase in per capita income. Greater equality of income.</td>
</tr>
<tr>
<td>High levels of unemployment</td>
<td>Increased employment an self-employment.</td>
</tr>
<tr>
<td>Low levels of productivity</td>
<td>Increased knowledge and improved skill (through education and training). Greater motivation to work.</td>
</tr>
<tr>
<td>High birth rates</td>
<td>Planned families. Improved health care.</td>
</tr>
<tr>
<td>Dependence on the primary sector</td>
<td>Improved agricultural production. Growing the secondary and tertiary industries. Connecting globally.</td>
</tr>
<tr>
<td>Deficient infrastructure</td>
<td>Improved elements of physical and other infrastructure. Reduce the cost of doing business.</td>
</tr>
</tbody>
</table>

Source: Enjoy economics p165

• Development policies are compiled of a mixture of the following:
  - Macro-economic policies (e.g. employment creation)
  - Micro-economic policies (e.g. competition)
  - Social care policies (e.g. welfare)
  - Redress policies (e.g. BEE)
• The main instruments that are used internationally to carry the policies of countries into reality are demand-side and supply-side approaches.
• Factors influencing development strategies:
  o Incentives to work and to produce
  o Human and physical capital formation
  o Satisfying international benchmarks
The demand-side approach

Producing growth

- The demand-side approach focuses on the expansion of the demand for goods and services produced in the economy.
- To ensure growth, there should be an adequate and growing demand for goods and services produced in the economy.
- Aggregate demand for goods and services consists of C, G, I and X-M
  \[ \Delta GDP = \Delta C + \Delta I + \Delta G + \Delta (X-M) \]
- The purpose of demand-side policies is to eliminate or reduce the severity of recessions through discretionary fiscal and monetary policies.
- The idea is to use these tools to ensure that aggregate demand increases at an appropriate non-inflationary pace.

Factors influencing development strategies

- Internationally economic development is defined in terms of the reduction of poverty, inequality and unemployment in a growing economy.
- A key element in economic development is that the people of a country must be major participants in the process that brings about improvement in the lives of the population.
- If growth only benefits a tiny, wealthy minority, it is not development.
- There are 3 major factors influencing development:
  - Domestic demand
  - Exports – increase in exports will lead to growth
  - Import substitution – a strategy to replace imports with domestically produced substitutes

The South African approach

- The South African approach to economic development is regarded as the process whereby the economy is transformed for reconstruction and development as well as growth, employment and redistribution.
- Much of the RDP and GEAR can be regarded as development policies.

The supply-side approach

Nature

- The supply-side approach to economic development consists of an expansion in the production capacity of the economy.
- Potential GDP can be defined as the output that the economy can produce under conditions of full employment of the factors of production.

Supply factors

1. Human resources
   - The following strategies are used for human resource development purposes:
     - Population control
     - Health
     - Education and training
     - Better utilisation of labour
     - Work ethics
2. Natural resources
- These are all the things found in nature, including soil, water, minerals, forests, fisheries and energy.
- The quantity or supply of most natural resources is limited and cannot be increased.

3. Capital formation
- Essential element for growth and development.
- Capital has 3 components:
  - Real/physical capital – e.g. buildings
  - Financial capital – e.g. funds to buy capital goods
  - Social capital – e.g. knowledge

4. Entrepreneurship
- Essential for development because entrepreneurs identify opportunities and combine them with other factors of production for a specific purpose.
- Entrepreneurship should be promoted through education and training.

5. Technology
- This is the application of new scientific knowledge in the form of inventions and innovations and it is important for stimulating long term economic growth and development.
- Developing countries usually use technology that has originated in developed countries, yet they must try and develop their own.

The South African Approach
South Africa uses the following policies:

- RDP
- GEAR
- ASGISA

RDP Approach

- RDP is an anti-poverty strategy.
- The RDP’s 5 main programmes:
  1. Meeting basic needs
  2. Developing human resources
  3. Building the economy
  4. Democratising the state and society
  5. Implementing the RDP
GEAR Approach

- The main idea behind GEAR is that “sustained growth” on a higher plane requires a transformation towards a competitive, outward oriented economy.
- The core programmes of GEAR are:
  1. A renewed focus on budget reform
  2. A faster fiscal deficit reduction programme
  3. An exchange rate policy
  4. A consistent monetary policy
  5. A reduction in tariffs
  6. Tax incentives
  7. To Introduce more flexibility into the labour market
  8. Expansion of trade and investment flows in South Africa

ASGISA

The key components are:

- Infrastructure (R320 billion for major capital projects)
- Human resources (skills development drive and prioritising certain sectors e.g. tourism, imports and exports)
- Security
- Fighting corruption

Evaluation of South African Policies

Growth Policies

- The growth performance needs to be considered in combination with the performance of the other macro-economic objectives:
  - Economic growth:
    - The average economic growth rate was 3,1% per year between 1994 and 2005.
  - Inflation:
    - It decreased from 9% in 1994 to 3,4% in 2005.
  - Employment:
    - It decreased in the formal non-agricultural sectors.
  - Exchange rate stability:
    - South Africa’s currency depreciated considerably since 1994.

Development Policies

- South Africa falls in the medium human development group of countries.
TOPIC 2: NORTH-SOUTH DIVIDE

The divide that separates the North or the developed world, from the South or the developing third world.

Did you know?

The North:
- is home to 25% of the world’s population and creates 80% of world income
- enjoys a good standard of living and life expectancy is at least 70 years
- is well educated, and most people have at least a secondary school education
- controls most of the world trade and money.

The South:
- is home to 75% of the world’s population and creates 20% of world income
- has a low standard of living, with an average life expectancy of about 50 years
- is lacking in education, and almost half its population lives below the poverty line (in extreme poverty).

Source: OBE for FET Economics p164

The divide can be traced to:

- Unequal standard of living indicators:
  - Per capita income
  - Life expectancy
  - Education
- Globalisation inequalities
Countries in the North maintain that globalisation is progress. However, many developing countries are disappointed with globalisation in 3 areas:
  - Poverty
  - Economic growth and stability
  - Trade
Environment
   - Northern countries – air pollution, water pollution, noise pollution and toxic waste. The Kyoto Protocol requires countries to reduce their greenhouse gases
   - Southern countries – Focus on agriculture. Main environmental problems are degradation and depletion of land, water and vegetation.

SECTION C: HOMEWORK

TOPIC 1: ECONOMIC GROWTH AND DEVELOPMENT

QUESTIONS: 20 minutes  
(Source: Focus Study Guide)
1. Explain the difference between economic growth and economic development. (12)
2. List the FIVE major policy programmes in the RDP. (10)
3. List FIVE aims of GEAR. (10)

TOPIC 2: NORTH-SOUTH DIVIDE

QUESTION 1: 18 minutes  
(Source: Focus Study Guide)
1.1. Explain what is meant by the following terms, giving an example of each.
   1.1.1. Developing countries (6)
   1.1.2. Developed countries (6)
   1.1.3. Newly industrialised countries (6)
1.2. List the most common characteristics of developing countries. (12)

SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: ECONOMIC GROWTH AND DEVELOPMENT

QUESTION 1: 30 minutes  
(Taken from DoE Exemplar 2008)
(The candidate should be able to give a little background on the growth and development policies of South Africa as part of the first paragraph)
Since 1994, the South African government has pursued international mainstream economic and development policies, making use of both demand-side and supply-side approaches. If the outcomes of these policies are satisfactory, the approaches used in pursuing them would also be satisfactory. ✓✓
The market approach could also be followed where, ✓✓ Demand factors such as: Consumer spending, Investment spending, Government spending, Exports and imports and ✓✓ Supply factors such as: Natural resources, Labour, Capital, Technology and entrepreneurship are being discussed. ✓✓
(Any 4 marks) (4)
In the following paragraphs the candidate should be able to describe the specific policy and then evaluate it against international best practice

Growth policies: (Any FOUR policies)

Economic growth: ✓ ✓
South Africa is a developing country; in terms of the World Bank a lower-middle income country. ✓ ✓
The average economic growth rate was 3.1% per year between 1994 and 2005, in comparison to an average of 1% per year over the previous decade. ✓ ✓
After the implementation of GEAR (1996), the budget deficit reduced to less than 3% of the GDP was accepted as benchmark. ✓ ✓

Inflation: ✓ ✓
Inflation decreased continuously from 9% in 1994 to 3.4% in 2005. ✓ ✓
The SARB dropped monetary targets and adopted inflation targets, initially in a 3%-6% range. ✓ ✓
Interest rates, based on the repo rate, are the main instrument used in the stabilisation policy. ✓ ✓
The consistently stable budget deficit also had a stabilising effect on the inflation rate. ✓ ✓

Employment: ✓ ✓
Employment in the non-agricultural sector of the economy decreased. ✓ ✓
The GEAR strategy suggested that a climate was needed that was conducive to employment creation by private sector. ✓ ✓
Labour productivity in the formal economy increased by 4.2% per year over the 10 years period until 2005. ✓ ✓
The unemployment rate increased from 14% in 1994 to 26.5% in 2005, yet employment increased – mainly because of informal sector activities. ✓ ✓

Exchange rate stability: ✓ ✓
Then from 2005 it appreciated. ✓ ✓
International reserves increased from 3% of GDP in 1994 to 18.7% in 2005. ✓ ✓
The SARB switched from managed floating to a free-floating exchange rate system. ✓ ✓

Development Policies: (Any FIVE policies) (Any 5 x 2) (10)

Macroeconomic policies: ✓ ✓
The successful implementation of macroeconomic policies is as much important for the rich as for the poor. ✓ ✓
The per capita GDP increased from 1.6% in 1998 to 3.5% in 2005. - the standard of living of the whole population improved. ✓ ✓
Redistribution through the tax system was also successful ✓ ✓ and has made possible a substantial increase in the distribution of benefits in cash and kind; macro-economic policy benefits, housing and service benefits. ✓ ✓

Microeconomic policies: ✓ ✓
Employment in the formal and informal sector increased by about 32%. (3.6% per year) from 1996 to 2005, which was higher than the average real growth rate of 3.2%. ✓ ✓
Social Policies: ✅ ✅
Almost 34.1% of the South African population are poor in terms of the international benchmark poverty line income ($2 a day) ✅ ✅
Poverty reduction is, therefore, a serious policy matter for the government, with the result that a number of policies focus on basic needs for the poor. ✅ ✅
Such as:
- Social security grants
- Benefits in kind
- Services
- Primary Health care
- Education

Redress: ✅ ✅
International organisations such as the UN articulate the importance of the empowerment of the indigenous peoples of developing countries. ✅ ✅
The South African government passed both empowerment and affirmative action acts and has introduced a range of other measures to ensure redress takes place. ✅ ✅

Black Economic Empowerment (BEE): ✅ ✅
The Broad Based Black Economic Empowerment Act, No.53 of 2003, provides the legal basis for the transformation of the South African economy. ✅ ✅
The speed and extent of empowerment and transformation were agreed upon in terms of so-called charters between government and various industries. ✅ ✅
The DTI published a scorecard that is used to measure progress of businesses and industries which include some of the following elements: ✅ ✅
- Management and control ✅ ✅
- Employment equity ✅ ✅
- and social responsibility ✅ ✅

Land redistribution and restitution: ✅ ✅
The government aims to redistribute 30% of agricultural land to previous disadvantage individuals and groups. ✅ ✅
By 2004 some 1.5% of agricultural land had been redistributed. ✅ ✅
Some 61% of claims for land restitution had been finalised. ✅ ✅

Affirmative action: ✅ ✅
Affirmative action rules are described in the Employment Equity Act, no 55 of 1998, ✅ ✅ and apply to employers with 50 or more employees or those with an annual income of, e.g., R2 million in agriculture, and R10 million in industry. ✅ ✅

2 Marks – Heading 2 Marks - Discussion

QUESTION 2: 10 minutes
(Taken from DoE Nov. 2008)

Economic growth ✅ ✅
• South Africa is a developing country where a 3% growth rate is acceptable for a developing country; in terms of the World Bank a lower-middle income country. ✅ ✅
• Government abandoned anti-cyclical demand management in favour of structural reform in 1996 as guiding principle in fiscal policy. ✅ ✅
• After the implementation of GEAR (1996), the budget deficit reduced to less than 3% of the GDP - accepted as benchmark, in line with international best practice. ✅ ✅
• Government reduced deficit; limiting public debt – internationally acknowledged for exceptional fiscal discipline. ✅ ✅

(Max. 4)
Inflation

- Inflation decreased continuously from 9% in 1994 to 3.4% in 2005. The SARB dropped monetary targets and adopted inflation targets, initially in a 3% - 6% range.
- Interest rates, based on the repo rate, are the main instruments used in the stabilisation policy.
- The consistently stable budget deficit also had a stabilising effect on the inflation rate.

Employment

- Employment in the non-agricultural sector of the economy decreased.
- The GEAR strategy suggested that a climate was needed that was conducive to employment creation by private sector.
- Private sector need to be more efficient to compete internationally
- Labour productivity in the formal economy increased by 4.2% per year over the 10 year period until 2005.

Exchange rate stability

- International reserves increased from 3% of GDP in 1994 to 18.7% in 2005. The SARB switched from managed floating to a free-floating exchange rate system.
- International benchmark: whether market forces determine rates – SA complies.

Accept applicable current economic examples or statistics.

QUESTION 3: 5 minutes

- Economic growth consists of growth of real GDP and implies an increase in capacity of economy to produce more goods and services. It requires policies that empower the economy.
- Economic development consists of growth of per capita real GDP and implies an increase in standard of living / capacity of population to produce more goods and services. It requires policies that empower people.
TOPIC 2: NORTH-SOUTH DIVIDE

QUESTION 1: 10 minutes  
(Taken from DoE Exemplar 2008)

<table>
<thead>
<tr>
<th>NORTH-SIDE Developed Countries</th>
<th>SOUTH-SIDE Developing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita income – 87 % produced by 15 % of world’s population ✓ ✓</td>
<td>85 % of world’s population living on 1/5 of world’s income ✓ ✓</td>
</tr>
<tr>
<td>Life expectancy is high in developed countries = 75 years ✓ ✓</td>
<td>Life expectancy in developing countries is low due to malnutrition, disease and ill health = 48 years ✓ ✓</td>
</tr>
<tr>
<td>Level of education: high – everyone literate ✓ ✓</td>
<td>Level of education low – only 46 % adult literacy. ✓ ✓</td>
</tr>
<tr>
<td>Trade: rich countries subsidise production – developing countries cannot compete ✓ ✓</td>
<td>Trade: developing countries are marginalized by subsidies. ✓ ✓</td>
</tr>
<tr>
<td>Mass consumption of oil and coal – damage to ozone layer – air, water, noise pollution and toxic waste ✓ ✓</td>
<td>Focus on agriculture – soil conditions, adequate rainfall and health of crops – degradation and depletion of land, water and vegetation – do not produce sufficient food – hunger and malnutrition ✓ ✓</td>
</tr>
</tbody>
</table>

(Any other relevant facts)

(4 X 2) (4 X 2)

QUESTION 2: 4 minutes  
(Taken from DoE Nov. 2008)

- Low standards of living / poverty ✓ ✓
- High levels of unemployment ✓ ✓
- Low levels of productivity ✓ ✓
- High birth rates / overpopulation ✓ ✓
- Dependence on primary sector / agriculturally-based economy ✓ ✓
- Deficient infrastructure ✓ ✓
- High mortality rate ✓ ✓
- Illiteracy / low levels of skill (education) ✓ ✓
- Low social mobility ✓ ✓
- Low per capita income ✓ ✓
- Malnutrition ✓ ✓
- Strong attachment to tradition ✓ ✓
- History of colonialisation ✓ ✓

(3 x 2) [6]
QUESTION 3:  4 minutes  
(Taken from DoE Nov. 2009)

- Per capita Income is higher ✔ ✔
- Life expectancy is higher ✔ ✔
- Education (literacy) is higher ✔ ✔
- Poverty is lower ✔ ✔
- Economic growth is higher ✔ ✔
- Higher level of productivity ✔ ✔
- Trade is controlled by the Northern Hemisphere (80%) ✔ ✔
- High technical skills ✔ ✔

(Any 3 x 2) [6]

QUESTION 4:  4 minutes  
(Taken from DoE Feb-March 2010)

- Per capita income ✔ ✔
- Life expectancy ✔ ✔
- Education ✔ ✔

(Accept any other relevant reason.)

(3 x 2) [6]

QUESTION 5:  6 minutes  
(Taken from DoE Nov. 2010)

5.1 The socio-economic and political division, which exists between wealthy developed countries collectively known as the North ✔ ✔ and the poorer developing countries, collectively known as the South, ✔ ✔ is referred to as the North-South Divide. ✔ ✔

Any relevant example  
(Any 2 x 2) [4]

5.2 Poverty✔ There is a growing gap between the rich and the poor. ✔ ✔
- Growth ✔ South Africa is unable to attract adequate FDI, to ensure sustainable economic growth / unemployment ✔ ✔
- Trade ✔ Rich countries continue to subsidize agricultural production, making it difficult for South Africa to compete on the global market / dumping ✔ ✔
- Environment ✔ dumping of nuclear waste ✔ ✔
- Imported inflation ✔ leads to an increase in production costs in import country ✔ ✔

(Any 2 x 3) [6]
SELF STUDY

TOPIC 1: SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

Learner Note: Industrial policy refers to any government regulation or law that encourages the ongoing operation of, or investment in, a particular industry. Industrial strategy refers to an action plan or method for achieving something.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 10 minutes  
(Taken from DoE Feb-March 2009)

Discuss Spatial Development Initiatives (SDI) by highlighting the concept, key objectives, examples and the alleviation of poverty as part of the government's policy to stimulate economic activities in specific areas.

QUESTION 2: 10 minutes  
(Taken from DoE Nov. 2009)

Discuss the suitability of South Africa's national industrial development policy.

QUESTION 3: 12 minutes  
(Taken from DoE Feb-March 2010)

Study the extract below and answer the questions that follow.

IN IT TOGETHER

Technical glitches, floods, overruns and a bitter legal battle between Rand Merchant Bank (RMB) and farmers have changed into a model for public-private partnerships (PPP). A 155 km pipeline provides export fruit farmers in this fertile but drought-prone region between Blyde River Canyon and the Kruger National Park with an efficient and reliable water supply for the first time. This has boosted exports, attracted new farming ventures, including one of two R1 billion biofuel plants developed by the IDC. This will lead to substantial water savings that will be allocated to black farmers. Wildlife estates worth hundreds of millions of rand have also been developed. The total revenue from this scheme rose from R38 million in 1995 to R840 million in 2005.

It has demonstrated how private-sector investment and expertise can generate infrastructure that drives the economy of a region. In 1998 the National Water Act (36 of 1998) came into force, requiring redistribution of South Africa’s water resources from white commercial to black emerging farmers. The so-called Blyde 800 was thus intended as a flagship agricultural empowerment project and its share of pipeline costs, running at R2,3 million per year, is covered by government. Problems occurred in the production of the pipeline, and RMB opted to take ownership and complete it with additional finance.

[Adapted from: Financial Mail, 27 July 2008]
3.1 What does the abbreviation IDC stand for? [2]

3.2 Which benefit in kind has been provided by the private sector? [3]

3.3 What has been the major advantage of a public-private partnership (PPP) to the farming community in Mpumalanga? [3]

1.4 Give an example from the extract that shows government involvement in the agricultural sector. [3]

3.5 Which positive effect will this PPP have on the balance of payments? [3]

3.6 Which redress policy is addressed through this PPP scheme? [2]

3.7 State any TWO advantages of this PPP. [4]

QUESTION 4: 6 minutes  
(Taken from DoE Nov. 2010)

Study the extract below and answer the questions that follow.

4.1 What does the abbreviation IDZ mean? [2]

4.2 State any THREE aims of the IDZs in the South African economy. [6]

4.3 What is the purpose of the EIDD? [2]

TOPIC 2: FREE TRADE AND PROTECTIONISM

Learner Note: This makes up part of South Africa’s foreign trade policy.

QUESTION 1: 4 minutes  
(Taken from DoE Exemplar 2008)

List any THREE arguments in favour of a policy aimed at protecting local industries. 
(3 x 2) [6]
QUESTION 2: 30 minutes  
(Taken from DoE Nov. 2008)

'The opening up of foreign trade … sometimes works a sort of industrial revolution in a country whose resources were previously underdeveloped.' (John Stuart Mill)

Discuss the arguments in favour of a policy of protection, and critically evaluate the South African international trade policies and major protocols regarding free trade.  

[50]

QUESTION 3: 10 minutes  
(Taken from DoE Feb-March 2010)

Discuss the arguments in favour of free trade.  

(8 x 2)  

[16]

QUESTION 4: 5 minutes  
(Taken from DoE Nov. 2010)

Discuss dumping as an argument in favour of protectionism.  

[8]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

REGIONAL DEVELOPMENT

What is regional development?

- Understanding the geographic distribution of economic activity across different regions.
- Regional economics = special economics
- An industry comprises enterprises producing the same kind of product.
- Industrial policy development in South Africa:
  - Pre 1994
    Economic crisis which led to high levels of unemployment and low levels of productivity and competitiveness.
    South Africa was inward-focused and had an overly protected domestic economy.
  - Since 1994
    South Africa has undergone high-level restructuring, stabilisation of the macro-economy and an opening up to world trade.
- South Africa’s uneven pattern of regional development.

Best practice for regional development

- Free market orientation
  Government intervention should be kept to a minimum
- Competitiveness
  Industry or business should not require on-going financial support or protection from government.
- Sustainability
  A region should support its own development
- Decentralised decision making
  Regional development should be the responsibility of local authorities
- Good governance  
  Development strategies should be well-managed and free of corruption  
  Democratic principles, transparency and accountability are important  
  Financial management and control  

- Provision of resources  
  Infrastructure and other resources need to be provided to regions where these do not exist  

- Partnerships  
  Multi-disciplinary and integrated approach  
  Partnerships should be built between central government, local authorities, civil society, special interest groups, NGOs and the private sector  

### Integrated industrial development  
In 2001 the South African government produced an industrial development plan: the Integrated Manufacturing Strategy (IMS) → focuses on improving competitiveness for economic growth and development.  

#### Cross-cutting focus  
For businesses to be viable they need to have access to:  
- Infrastructure  
  - Physical – air, road, rail and sea logistics  
  - Social – education and training, particularly in maths and science  
- Finance – Small and BEE businesses in particular  
- Human resource development  
  - Focus on post-school training  
  - National Skills Authority (NSA) is in charge of training  
- Technology  
  - Invention and research and development (R&D)  

#### Key input sectors  
- Transport  
- Telecommunications  
- Energy  

#### Key growth sectors  
- Exports  
- Tourism  
- Agriculture  
- ICTs  
- Cultural  

Source: Enjoy economics p187
• Key growth factors
  o Exports
  o Tourism
  o Agriculture
  o Information, communication and technology
  o Cultural industries
• Small business development
  o Fills gaps left by large businesses

SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

Spatial Development Initiatives (SDI)

An SDI is an interdepartmental investment strategy led by the national departments of Trade and Industry (dti) and Transport (DoT)

Key objectives:
• To stimulate economic activity in selected strategic locations
• To generate economic growth and faster sustainable economic development
• To create employment in underdeveloped areas
• To develop infrastructure projects
• To develop inherent economic potential in certain areas
• To ensure rapid planning and development
• To restructure the apartheid economy
• To maximise certain types of private sector investment
• To exploit underutilised location and economic advantages for export-orientated growth
• To establish public-private partnerships (PPP)

Industrial Development Zones (IDZ)

• Geographically designed, purpose-built industrial sites providing services tailored for export oriented businesses.
• Physically enclosed and linked to international airports and ports.

Corridors

• A track of land that forms a passageway allowing access from one area to another.
• Offering efficient, high density production of agricultural, mining and manufactured goods.
Financial incentives

- Small Medium Enterprise Development Programme (SMEDP)
  - Businesses must be competitive in their own right without protection or subsidies.
- Skills Support Programme (SSP)
  - Cash grant of up to 50% of costs of training new staff resulting from an expansion or new project.
- Critical Infrastructure Facility (CIF)
  - Financial incentives to large enterprises whose projects require infrastructure.
- Duty Free Incentives
  - Import initiatives given to businesses established within a IDZ.
- Foreign Investment Grant (FIG)
  - Cash incentive scheme for foreign investors who invest in manufacturing businesses in South Africa.
- Strategic Investment Programme (SIP)
  - Industrial investment allowance for projects in the manufacturing, computer and R&D fields.
- Black Business Supplier Development Programme (BBSDP)
  - Provides black owned (51% black ownership) enterprises with access to training to improve the management effectiveness of their enterprise.
THE SUITABILITY OF SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

National Policy

- Promoting investment in physical and human capital
- Encouraging R&D and promoting innovation and protecting intellectual property
- Supporting technology
- Investing in physical infrastructure

Regional Policy

- Workers-to-the-work
  Priority for employment creation.
  Workers have to move to where the employment is.
  E.g. relocation allowances
- Work-to-the-workers
  Most likely to positively address long term problems of structural unemployment and regional differences in growth and development.
  SDIs and IDZs

Small Business Development

- Create employment.
- Focus on incentives for small businesses.
- Improved access to finance and capital, information and advice.
- Promotion of entrepreneurship among women and the youth.

Black Economic Empowerment (BEE)

- Empowerment of indigenous people in the development of developing countries.

Regional Development on the African Continent

- African Union
  Africa’s premier institution and principal organisation for the promotion of accelerated socio-economic integration of the continent.
- New Partnership for Africa’s Development (NEPAD)
  A holistic, comprehensive socio-economic development framework for Africa that aims to promote sustainable development on the African continent.

TOPIC 2: FREE TRADE AND PROTECTIONISM

Protectionism

- Protectionism: Restriction of international trade. Limits the quantities of goods and services traded.

Forms of Trade Restriction

- Customs duties
- Import quotas
- Import deposits (Government requires importers to make a cash deposit equal to a fixed percentage of the value of goods ordered for import).
Arguments for Protectionism

- Protection of infant industries.
- Prevent dumping (by other countries).
- National defence – there must be some minimum level of local production and also to provide protection against an interruption of supply.
- Employment.
- Maintain a favourable balance of payments.

Arguments Against Protectionism

- Industries become less competitive.
- Consumers pay more for products.
- Problem of identifying key industries.
- Over-protection discourages free trade.

FREE TRADE

Free trade occurs when:

- There are no barriers to import and export of goods and services.
- There is free movement of goods and services.
- There are no trade-distorting policies (e.g. Import taxes, subsidies).

Arguments for free trade

- Promotes competition and improves resource allocation and economies of scale where a country has competitive advantage.
- Promotes increased efficiencies, product improvements and technological advances and, therefore, lowers costs of production.
- Accelerates overall economic growth.
- Developing countries can take advantage of foreign expertise.
- Generates foreign exchange.

Arguments against free trade

- Developed countries can exploit developing countries.
- Causes jobs from developed nations to move to other countries where labour rates are lower.
- Supports the movement of products and employers which benefits developed nations, but not the free movement of labour, which would favour the developing nation.
- Living conditions and careers change too fast.
TOPIC 1: SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

QUESTION 1: 17 minutes (Source: Economics For All)

1.1 Define industrial policy. (3)
1.2 Explain the complex challenge facing South Africa’s industrial development policies. (3)
1.3 List three SDIs. (6)
1.4 Name and explain FOUR financial incentives. (16)

TOPIC 2: FREE TRADE AND PROTECTIONISM

QUESTION 1: 20 minutes (Source: The Answerseries)

1.1 Discuss four arguments in favour of protectionism. (16)
1.2 Discuss four arguments in favour of free trade. (16)

SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: SOUTH AFRICA’S INDUSTRIAL DEVELOPMENT POLICIES

QUESTION 1: 10 minutes (Taken from DoE Feb-March 2009)

1. Concept SDI refers to national government initiative programme aimed at unlocking inherent and underutilised economic development potential of certain specific spatial locations in SA / regional development initiative in SA to attract infrastructure and business investments to neglected and underdeveloped areas (max 2)

2. Involves strategic initiatives by government and its key objectives are:
   • Stimulate economic activity in selected strategic locations throughout SA
   • Generate economic growth and foster sustainable industrial development
   • Create long-term employment in underdeveloped areas with high poverty and unemployment
   • Develop projects of infrastructure in certain areas and finance them by way of lending and private sector investment
   • Develop the inherent economic potential of certain areas
   • Ensure rapid planning and delivery
   • Restructure the apartheid-space economy
   • Maximise various types of private sector investment
   • Exploit SA underutilised location and economic advantages for export-orientated growth of SDIs (max 3 x 2)
   • Establish private—public partnerships (PPPs)
3. **Examples:**
- Maputo Development corridor ✔✔
- Lubombo Corridor ✔✔
- Richards Bay SDI ✔✔
- KwaZulu-natal ✔✔
- Wild Coast SDI ✔✔
- Fish River SDI ✔✔
- West Coast Investment Initiative ✔✔
- Platinum SDI ✔✔
- Phalaborwa SDI ✔✔
- Coast-2-Coast Corridor ✔✔
(max 2 x 2)

4. To foster sustainable industrial development in areas where poverty and unemployment are the highest, the SDI focuses on:
- High-level support in areas where socio-economic conditions require concentrated government assistance ✔✔
- Where inherent economic potential exists ✔✔
(2 x 2) [16]

**QUESTION 2:** 10 minutes  
(Taken from DoE Nov. 2009)

- Promoting investment in physical and human capital ✔✔ – human capital and sound skills base crucial for attracting global business to SA and ensure long-term economic growth ✔✔ creates strong base for productivity sensitivity because skilled workers are more productive ✔✔
- Encouraging Research and Development (R & D) and promoting innovation ✔✔ protected intellectual property ensures more effective use of patents and copyright ✔✔ encourages businesses to develop new products and commit themselves to intensive and focused research ✔✔
- Supporting technology ✔✔ encourages enterprises to apply scientific and technical knowledge to improve products and production processes ✔✔ government has established technology incubators – these products and production processes give enterprises a comparative advantage and open up export opportunities ✔✔
- Enforcing competitiveness ✔✔ enhances market efficiencies and ensures that businesses are lean and mean ✔✔
- Investing in physical infrastructure ✔✔ includes maintenance, improvement and expansion of infrastructure ✔✔
- It is clear that countries that industrialised the most rapidly, have implemented large-scale, robust and conditional industrial policies which were closely integrated with related policies ✔✔

The successes South Africa experienced were:
- Market access for SA producers was secured through re-entry into the WTO and 2 major trade agreements with EU and the SADP ✔✔
- SA has a vibrant automotive industry due to the motor industry Development Programme with substantial multiplier effects on associated sectors ✔✔
- Black economic empowerment has become a fundamental reality of doing business in South Africa ✔✔
- The country’s technology has enjoyed substantial success, such as the Support Programme for Industrial Innovation and the Technology and Human Resources for Industry Programme ✔✔
**QUESTION 3:**

**12 minutes**

(Taken from DoE Feb-March 2010)

3.1 Industrial Development Corporation ✓✓

3.2 Production of the pipe line (costs in production) ✓✓ ✓

3.3 Efficient and reliable water supply ✓✓✓

3.4 "In 1998 the Water Act came into force" ✓✓✓

"... pipeline costs, running at R2.3 m. per year, is covered by government" ✓✓✓

(Any 1 x 3)

3.6 BEE ✓✓ land/water redistribution ✓✓

(Any 1 x 2)

3.7 Growth of real GDP ✓✓

- Increase in produce of goods and services ✓✓
- Income can be redistributed ✓✓
- Employment increased ✓✓

(Any 2 x 2)

**QUESTION 4:**

**6 minutes**

(Taken from DoE Nov. 2010)

4.1 Industrial Development Zone ✓✓

4.2 Attract new investment in export-driven industries. ✓✓

- Encourage economic growth by attracting foreign investment in industrial development. ✓✓
- Duty free importation of production-related raw materials and inputs. ✓✓
- A zero rate of VAT on supplies procured from South African sources. ✓✓
- Government incentive schemes. ✓✓
- Reduced taxation and exemption for some activities or products. ✓✓
- Promote exports ✓✓
- Job creation ✓✓
- Enhance competitiveness of local industries (immediate environment) ✓✓
- Promote and develop links between domestic and zone-based industries ✓✓
- Enable exploitation of resource-intensive industries ✓✓

(Any 3 X 2)
TOPIC 2: FREE TRADE AND PROTECTIONISM

QUESTION 1: 4 minutes  
(Taken from DoE Exemplar 2008)
- Raising revenue for the government ✓✓
- Protecting the whole industrial base ✓✓
- Protecting particular industries ✓✓
- Protecting domestic standards ✓✓
(Any other relevant facts)  
(Any 3 x 2) [6]

QUESTION 2: 30 minutes  
(Taken from DoE Nov. 2008)

DEFINITION: Protection is the application of a trade policy whereby the state discourages importing of certain goods and services with a view to protecting home industries against unequal competition from abroad. ✓✓✓

ARGUMENTS IN FAVOUR OF PROTECTION

1. Raising revenue for the government: ✓✓
   • In developing countries the tax base is more often limited because of low incomes of individuals and businesses ✓✓
   • Low incomes do not provide much in form of income taxes ✓✓
   • Customs duties on imports – significant source of revenue ✓✓

2. Protecting the whole industrial base: ✓✓

   FOUR considerations relevant for protecting industrial base of country:
   • Maintaining domestic employment / reduce unemployment and provide more job opportunities ✓✓
     - countries with high levels of unemployment – pressurised to stimulate employment creation ✓✓
     - protectionist policies used to stimulate industrialisation ✓✓
     - domestic employment encouraged through imposing import restrictions ✓✓
   • Protecting workers ✓✓
     - countries with low wages represent unfair competition and threaten the standard of living of more highly paid workers ✓✓
     - protection necessary to prevent local wage levels from falling ✓✓
     - helps protect local businesses from closing down or becoming unprofitable ✓✓
   • Diversifying the industrial base ✓✓
     - protectionism helps countries not to over-specialise ✓✓
     - import restrictions may be imposed on range of products in order to ensure that number of domestic industries develop ✓✓
   • Developing strategic industries ✓✓
     - certain industries of strategic importance, e.g. agriculture and energy ✓✓
     - developing countries need to develop these industries to become self sufficient ✓✓

3. Protecting particular industries: ✓✓

   • Dumping ✓✓
     - due to government subsidies enterprises are permitted to sell at very low prices – leads to price discrimination ✓✓
     - products can be exported to dispose of accumulated stocks – importing country will benefit ✓✓
     - objective can also be to drive out domestic producers and gain strong market position – consumers will lose out due to reduction in choice ✓✓
• Infant industries / Industrial development
  - newly established industries suffer to survive due to higher average costs
  - competition in the early days makes growth possible, they can take advantage of economies of scale, lower average costs and become competitive – protection can now be removed

• Declining industries
  - structural changes in demand and supply may influence industry negatively
  - these businesses must leave business gradually – possible if protection is granted – gives factors of production time to move to other industries
  - they lost their comparative advantage – may lead to large scale unemployment

4. Protecting domestic standards
• Trade restrictions like food safety, human rights and environmental standards
• Stabilising exchange rate and balance of payments
• Protecting natural resources from being exploited
• Economic self-sufficiency
• Greater economic stability
• Natural resources not depleted

CRITICAL EVALUATION OF SA FREE TRADE:
• SA part of customs union since 1910 – various protocols now replaced by SADC protocol – progress made towards strengthening bilateral ties with main trading partners – has taken form of free trade area (FTA) protocols
• South African Customs Union – members currently jointly negotiate FTAs with the rest of the world like European Free Trade Association
• South African Development Community (SADC) presently has status of FTA – 97% qualifies for duty-free access to SA – should be fully liberalised by 2010
• African Union is developing continent into economic and monetary union – adopted Nepad as strategy – first phase to develop 5 regional FTAs – SADC is one of the FTAs
• European Union-SA FTA entails freeing of tariffs – 95 % of EU imports from SA by 2010 and 86 % free of tariffs on imports from EU over 12 year period. Trade, Development and Cooperation Agreement implemented in 2000 established free trade between SA and EU
• Mercusor – SA signed a Framework Agreement with Mercusor in 2000, to expand trade and create free trade area between parties (Latin America) – eventually FTA will include all SACU members
• WTO promotes free trade – persuades countries to abolish import tariffs
• Trade with Indian Ocean Rim Association for Regional Cooperation (trade with India, Malaysia and Japan increased)
• SA signing Marrakesh Agreement to liberalise international trade by lowering import tariffs and barriers
• Cotonou Agreement – SA member of ACP (Africa, Caribbean and Pacific) Group
• International Trade and Economic Development Division of Department of Trade and Industry increase SA access to markets worldwide – on preferential terms

(Any 5 x 2)(10)
QUESTION 3: 10 minutes  (Taken from DoE Feb-March 2010)

Free trade occurs when there are no barriers to trade, such as taxes on imported goods or bans on imports. ✓✓

Specialisation ✓✓
- The theory of comparative advantage shows that world output can be increased if countries specialise in what they are relatively best at producing. ✓✓
- Specialisation will cause world trade and consumption to be maximised ✓✓

Economies of scale ✓✓
- Trade causes economies of scale to be maximised and costs to be reduced. ✓✓
- It's a source of comparative advantage. ✓✓

Choice ✓✓
- Trade allows consumers the choice of what to buy from the whole world, and not only domestically produce ✓✓
- Consumer welfare is increased. ✓✓

Innovation ✓✓
- Free trade implies competition and a lack of free trade often leads to domestic markets being dominated by a few enterprises who avoid competition among themselves. ✓✓
- Provides a powerful incentive to innovate. ✓✓
- It leads to better production methods which enable producers to cut costs and improve the quality and the reliability of goods. ✓✓  

\[8 \times 2\] [16]

QUESTION 4: 5 minutes  (Taken from DoE Nov. 2010)

- Foreign enterprises may engage in dumping because government subsidies permit them to sell goods at very low prices or below cost ✓✓ or because they are seeking to raise profits through price discrimination ✓✓
- In the latter case the initial reason for exporting products at a low price may be to dispose of accumulated stocks of goods. ✓✓
- In the short term, consumers in the importing country will benefit. ✓✓
- However, their long-term objective may be to drive out domestic producers and gain strong market position. ✓✓
- In this case consumers are likely to lose out as a result of the reduction in choice and the higher prices that the exporters will be able to charge. ✓✓
- Protectionism prevents foreign industries from dumping their surpluses and out-of-season goods at low prices, which may be harmful to home industries ✓✓

\(\text{(Any } 4 \times 2\) [8]
TOPIC 3: IMPORT SUBSTITUTION AND EXPORT PROMOTION

Learner Note: Import substitution is used to develop local industries. Export promotion is an economic development strategy.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 4 minutes  
(Taken from DoE Exemplar 2008)
List any THREE advantages of export promotion.  
(3 x 2) [6]

QUESTION 2: 4 minutes  
(Taken from DoE Feb-March 2009)
Name any THREE advantages of import substitution.  
(3 x 2) [6]

QUESTION 3: 30 minutes  
(Taken from DoE Nov. 2009)
"Dismantling barriers to trade, especially those facing South African exporters, are a critical component of any economic strategy that promotes sustainable growth."
[Source: 2006/07 SA Yearbook]

Discuss export promotion as part of the South African international trade policies, briefly highlighting the effectiveness of the methods through which exports are promoted.  
[50]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 3: IMPORT SUBSTITUTION AND EXPORT PROMOTION

EXPORT PROMOTION

- **Export promotion**: measures taken by the government to increase the quantity and variety of goods and services that are exported.

Reasons

- To eventually achieve significant export-led economic growth.
- Export enlarges the production capacity of a country because more and larger industries are established.
- Export markets are much bigger than domestic markets.

Methods

- **Incentives**
  - Encourage manufacturers to export and increase in the volume of production.
  - E.g. information on export markets, research into new markets, export credit guarantees and publicity.
- **Subsidies**
  - E.g. cash payments to exporters, refunds on import tariffs, tax rebates, tax concessions, and assistance in financing exports.
Trade neutrality
  o Incentives in favour of exports, equal import substitution protection.

EPZs
  o Free trade enclaves within a protected country.
  o Fenced and controlled industrial park that falls outside the domestic customs area, and is usually near a harbour or airport.

**Dumping:** prices of export goods must not be viewed as “dumping”, i.e. selling goods in a foreign market at prices that are below their cost of production.

**Advantages**

- No limitations – world market is very large.
- Cost and efficiency – organised along lines of competitive advantage.
- Increased domestic production.
- Exchange rates – realistic, no need to exchange controls.

**Disadvantages**

- Real cost of production – subsidies and incentives reduce the cost of production.
- Lack of competition – low prices can force competitors out of the market.
- Increased tariffs and quotas – overseas competitors may retaliate.
- Protection of labour-intensive industries.
- Dumping.

**Import Substitution**

**Import substitution:** The replacement of goods that were previously imported by domestic production.

**Reasons**

- Diversification
  o Expansion of manufacturing.
  o Infant industry argument: new industries try to establish themselves, can’t really compete with imports and need to be protected.

- Trade
  o To accelerate economic growth, developing countries have to produce manufactured goods.
Methods

- Tariffs
  - (Customs duties or import duties) are taxes on imported goods.
  - Effect: raises prices of imported goods for customers and demand shifts from imports to domestically produced goods.

- Quotas
  - Limit on supply of a good or service.
  - Effect: reduce supply and increase price.

- Subsidies
  - Subsidies paid to domestic producers.

- Exchange controls
  - Limiting amount of foreign exchange available to those wishing to import goods and services or to invest or to travel abroad.

- Physical controls
  - Complete ban or embargo on import of certain goods.

- Diverting trade
  - Import deposits, time consuming customs procedures, quality standards.
  - Makes it difficult to import goods.

Advantages

- Increased employment
- More choice
- Diversification

Disadvantages

- Capital and entrepreneurial talent are dawn away from the areas of competitive advantage to areas with higher profits due to protection.
- Technology from abroad may not be feasible locally.
- Lowers competitiveness and efficiency.
- Leads to more demands for protection.
- Protection does not promote backward linkages to other industries that aren’t protected.

SECTION C: HOMEWORK

TOPIC 3: IMPORT SUBSTITUTION AND EXPORT PROMOTION

QUESTION 1: 20 minutes  
(Source: The Answer Series)

1.1 Discuss the disadvantages of export promotion. (16)
1.2 Discuss the disadvantages of import substitution. (16)

[32]
SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 3: IMPORT SUBSTITUTION AND EXPORT PROMOTION

QUESTION 1:  
4 minutes

(Taken from DoE Exemplar 2008)

- No limitations ✔ ✔
- Cost and efficiency ✔ ✔
- Increased domestic production ✔ ✔
- Exchange rates ✔ ✔

(Any other relevant facts) (3 x 2) [6]

QUESTION 2:  
4 minutes

(Taken from DoE Feb-March 2009)

Increased employment ✔ ✔
Bigger variety of products produced / diversification / broader industrial base ✔ ✔
Decrease in imports / Positive effect on BoP ✔ ✔
Industrial development encouraged ✔ ✔
Easy to implement through imposition of tariffs and quotas ✔ ✔

(Any 3 x 2) [6]

QUESTION 3:  
30 minutes

(Taken from DoE Nov. 2009)

INTRODUCTION

Export promotion is when governments pay incentives to encourage production of goods and services that can be exported ✔ ✔ ✔

(Max. 3)

BODY

REASONS

- Achieve significant export-led economic growth ✔ ✔
- Export enlarges production capacity of country because more and larger manufacturing industries are established ✔ ✔
- The first step to export-led economic growth is to implement policies that encourage the establishment of industries to produce goods and services for export markets ✔ ✔

METHODS

Exports are promoted through:

- **Incentives:** ✔ ✔ export incentives include information on export markets, research with regard to new markets, concessions on transport charges, export credit and export credit guarantees and publicity commending successful exporters ✔ ✔ this will encourage manufacturers to export an increased volume of their production ✔ ✔
- **Direct Subsidies:** ✔ ✔ Include cash payments to exporters, refunds on import tariffs, employment subsidies, and competitiveness of exporting company ✔ ✔ Aims: reduce cost of production ✔ ✔ increase competitiveness of exporting company ✔ ✔ explore and establish overseas markets ✔ ✔ affected government expenditure ✔ ✔
- **Indirect subsidies:** ✔ ✔ influence government income ✔ ✔ e.g. general tax rebates, tax concessions on profits earned from exports or on capital invested to produce export goods, refunding of certain taxes ✔ ✔ allows companies not to pay certain taxes to lower their prices and enables them to compete in international markets ✔ ✔
- Challenge for governments to design incentives and subsidies in such a way that prices of export goods can’t be viewed as dumping prices ✔ ✔
1) **Trade neutrality** ✓ ✓ can be achieved if incentives in favour of export production are introduced up to point that neutralises the impact of protectionist measures in place ✓ ✓ e.g. subsidies equal to magnitude of import duties can be paid ✓ ✓

2) **Export processing zones (EPZs)** ✓ ✓ is free-trade enclave within a protected area – is fenced and controlled industrial park that falls outside domestic customs area, and usually located near harbour or airport ✓ ✓

**Note:** For the response with regard to the effectiveness of export promotion methods, a maximum of 5 marks can be allocated.

### ADVANTAGES

- **No limitations on size and scale** ✓ ✓ since world market is very large ✓ ✓
- **Cost and efficiency of production** ✓ ✓ based on this and organised along lines of comparative advantage ✓ ✓
- **Increased domestic production** ✓ ✓ will expand exports to permit more imports and may result in backward linkage effects that stimulate domestic production in related industries ✓ ✓
- **Creates employment opportunities** ✓ ✓
- **Increase in exports has positive effect on balance of payments** ✓ ✓
- **Increase in production leads to lower domestic prices, which benefit local consumers** ✓ ✓

### DISADVANTAGES

- **Real cost of production** ✓ ✓ subsidies and incentives reduce total cost of production which must be met from sales ✓ ✓ real cost is thus concealed by subsidies ✓ ✓ products cannot compete in open market ✓ ✓
- **Lack of competition** ✓ ✓ businesses charge prices that are so low that they force competitors out of the market ✓ ✓
- **Increased tariffs and quotas** ✓ ✓ can be against spirit of provisions of WTO ✓ ✓ overseas competitors retaliate with tariffs and quotas ✓ ✓ goods are sold domestically below their real cost of production (export subsidies and dumping) ✓ ✓
- **Protection of labour-intensive industries** ✓ ✓ developed countries maintain high levels of effective protection for their industries that produce labour-intensive goods in which developing countries already have or can achieve comparative advantage ✓ ✓
- **Withdrawal of incentives often leads to closure of effected companies** ✓ ✓
- **Incentives often lead to inefficiencies in the production process, since companies don’t have to do their best to compete** ✓ ✓
- **Can be seen as dumping** ✓ ✓

**CONCLUSION**

From the above discussion it is clear that protection still plays a significant role in the South African international trade policy. ✓ ✓

(Any other relevant conclusion must be accepted.) [50]
Learner Note: The balance of payments account is a statement of all the transactions undertaken by the citizens of a country with people and institutions in the rest of the world, usually for a period of three months or a year. It also records the value of the country’s transactions. The value is given in terms of the currency of the country.

SECTION A: TYPICAL EXAM QUESTIONS

TOPIC 1: BALANCE OF PAYMENTS

QUESTION 1: 4 minutes 6 marks (Taken from DoE Exemplar 2008)
List any THREE subaccounts/components of the balance of payments. (3 x 2) [6]

QUESTION 2: 12 minutes 20 marks (Taken from DoE Nov 2008)
Study the table below and answer the questions that follow.

<table>
<thead>
<tr>
<th>BALANCE OF PAYMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTH AFRICA – AN EXTRACT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current account</th>
<th>2006 (R millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise exports</td>
<td>398 532</td>
</tr>
<tr>
<td>Merchandise imports</td>
<td>476 545</td>
</tr>
<tr>
<td>Net gold exports</td>
<td>35 470</td>
</tr>
<tr>
<td>Service receipts</td>
<td>81 353</td>
</tr>
<tr>
<td>Payment for services</td>
<td>96 950</td>
</tr>
<tr>
<td>Income receipts</td>
<td>40 234</td>
</tr>
<tr>
<td>Income payments</td>
<td>75 990</td>
</tr>
<tr>
<td>Current transfers (net receipts)</td>
<td>- 18 494</td>
</tr>
</tbody>
</table>

**Balance on current account**

<table>
<thead>
<tr>
<th>Financial account</th>
<th>2006 (R millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct investments</td>
<td>- 47 350</td>
</tr>
<tr>
<td>Portfolio investments</td>
<td>130 583</td>
</tr>
<tr>
<td>Other investments</td>
<td>19 278</td>
</tr>
</tbody>
</table>

**Balance on the financial account** 102 511

Unrecorded transactions 39 466

[Source: SARB Quarterly Bulletin, June 2006]
2.1 Define the term *balance of payments*. (3)

2.2 Name ONE other sub-account or component of the balance of payments. (3)

2.3 Name the item in the financial account which will contain shares bought by foreigners. (3)

2.4 Why is gold entered as a separate item on the current account and not as part of merchandise exports? (3)

2.5 Calculate the balance on the current account. (Show ALL calculations.) (8)

**QUESTION 3:** 12 minutes 20 marks *(Taken from DoE Feb-March 2009)*

Study the extract of the balance of payments (BOP) below and answer the questions that follow.

### BALANCE OF PAYMENTS

**ANNUAL FIGURES**

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current account</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise exports, free on board</td>
<td>281 827</td>
<td>325 129</td>
<td>399 030</td>
</tr>
<tr>
<td>Net gold exports</td>
<td>28 698</td>
<td>27 023</td>
<td>35 470</td>
</tr>
<tr>
<td>Service receipts</td>
<td>62 197</td>
<td>70 896</td>
<td>81 294</td>
</tr>
<tr>
<td>Income receipts</td>
<td>20 973</td>
<td>29 550</td>
<td>40 234</td>
</tr>
<tr>
<td>Less: Merchandise imports, free on board</td>
<td>311 759</td>
<td>358 519</td>
<td>476 545</td>
</tr>
<tr>
<td>Less: Payments for services</td>
<td>66 418</td>
<td>77 384</td>
<td>96 985</td>
</tr>
<tr>
<td>Less: Income payments</td>
<td>48 823</td>
<td>60 975</td>
<td>75 985</td>
</tr>
<tr>
<td>Current transfers (net receipts +)</td>
<td>-11326</td>
<td>-17 899</td>
<td>-18 894</td>
</tr>
<tr>
<td><strong>Balance on current account</strong></td>
<td>-44 631</td>
<td>-62 179</td>
<td>-112 346</td>
</tr>
</tbody>
</table>

|                          |           |           |           |
| **Financial account**    |           |           |           |
| Net direct investments   | -3 566    | 36 354    | -49 078   |
| Net portfolio investments | 40 629    | 29 903    | 129 192   |
| Other investments        | 8 718     | 9 762     | 21 928    |
| **Balance on financial account** | 45 781   | 76 019    | 102 042   |

[Adapted from: Quarterly Bulletin SARB, December 2007]

3.1 Define the term *balance of payments*. (3)

3.2 Name ONE other account that forms part of the BOP. (2)

3.3 Which item captures the effect of a foreigner purchasing shares on the JSE Securities Exchange? (2)

3.4 Why is gold exports listed as a separate item in the BOP? (3)

3.5 Calculate the trade balance on the current account for 2006. (5)

3.6 What negative impact will the recent trend in the current account have on the BOP? (3)

3.7 Name ONE way in which the BOP deficit can be reduced or eliminated. (2)

[20]
QUESTION 4: 30 minutes  50 marks  (Taken from DoE Feb-March 2010)

Analyse the components of the balance of payments and suggest ways in which the government can correct a sustained deficit.  

TOPIC 2: FOREIGN EXCHANGE MARKET

**Learner Note:** Countries trade with one another in order to take advantage of the price differences of goods and services that exists between countries. Foreign currency is traded in the foreign exchange market. A foreign exchange market is defined as a market in which one currency can be exchanged for another currency.

**QUESTION 1:** 4 minutes  6 marks  (Taken from DoE Nov 2008)

Name THREE types of foreign exchange rate systems.  

**QUESTION 2:** 4 minutes  6 marks  (Taken from DoE Nov 2009)

List any THREE factors influencing demand for foreign exchange.  

**QUESTION 3:** 6 minutes  10 marks  (Taken from DoE Nov 2010)

Study the table below and answer the questions that follow.

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of export prices</th>
<th>Index of import prices</th>
<th>Terms of trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>105</td>
<td>101</td>
<td>A</td>
</tr>
</tbody>
</table>

3.1 Calculate the terms of trade for A. Show ALL calculations.  
3.2 What does a decrease in the terms of trade mean?  
3.3 What is the base year according to the table?  
3.4 Describe the movement in the terms of trade from 2005 – 2010.  

**QUESTION 4:** 10 minutes  16 marks  (Taken from DoE Feb-March 2009)

Explain any FOUR supply factors that cause international trade.  

[50]
QUESTION 5: 6 minutes 10 marks  
(Taken from DoE Nov 2010)

Study the graph below and answer the questions that follow.

![Graph of Demand and Supply of Foreign Exchange]

5.1 At what point on the graph does equilibrium for foreign exchange originally occur?  
(2)

5.2 What happens to the demand for dollars when DD shifts to D1?  
Give ONE reason.  
(4)

5.3 What happens to the value of the rand when DD shifts to D1?  
Motivate your answer.  
(4)

[10]

SECTION B: ADDITIONAL CONTENT NOTES

TOPIC 1: BALANCE OF PAYMENTS

The balance of payments account

- The balance of payments account: is a systematic record of all the transactions of a country’s inhabitants with the rest of the world over a given period of time.  
- The IMF publishes a Balance Of Payments Manual to standardise all balance of payments, and it contains the rules about which transactions are allowed.  
- It works in the same way as the accounting records of a business:
A favourable balance of payments usually implies a surplus which means that more funds are flowing in than leaving.

Every transaction is recorded twice, once as a credit and once as a debit.

A key point to remember about the balance of payments account is that the value of all the transactions must sum to zero.

The balance of payments account consists of the following 4 sub-accounts:

- Current account
- Capital transfer account
- Financial account
- Changes in reserves account

Current account

- The current account includes 3 main sets of transactions:
  - trade in goods
  - trade in services
  - primary income flows

- Merchandise exports – includes the trade of all physical goods.
- Net gold exports – only gold-producing countries
- Service receipts – various kinds of services.
- Income receipts – income earned by SA residents in the rest of the world.
- Merchandise imports, payments for services and income payments
- Current transfers – money, goods or services transferred without receiving anything tangible.

South African Balance of Payments for 2004

<table>
<thead>
<tr>
<th>Current account</th>
<th>R million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise exports</td>
<td>278 932</td>
</tr>
<tr>
<td>Net gold exports</td>
<td>32 830</td>
</tr>
<tr>
<td>Service receipts</td>
<td>53 426</td>
</tr>
<tr>
<td>Income receipts</td>
<td>20 641</td>
</tr>
<tr>
<td>LESS Merchandise imports</td>
<td>-311 930</td>
</tr>
<tr>
<td>LESS Payment for services</td>
<td>-60 099</td>
</tr>
<tr>
<td>LESS Income payments</td>
<td>-48 611</td>
</tr>
<tr>
<td>Current transfers (net receipts +)</td>
<td>-9 562</td>
</tr>
<tr>
<td><strong>Balance on current account</strong></td>
<td><strong>-44 373</strong></td>
</tr>
<tr>
<td>Capital transfer account (net receipts +)</td>
<td>342</td>
</tr>
</tbody>
</table>
### Financial account

<table>
<thead>
<tr>
<th></th>
<th>Liabilities</th>
<th>Assets</th>
<th>Net direct investments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct investments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td>3 773</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>-10 359</td>
<td></td>
<td>-6 586</td>
</tr>
<tr>
<td><strong>Portfolio investments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td>44 848</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>-5 944</td>
<td></td>
<td>38 904</td>
</tr>
<tr>
<td><strong>Other investments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td>13 499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>18 059</td>
<td></td>
<td>31 558</td>
</tr>
</tbody>
</table>

#### Balance on financial account

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unrecorded transactions</strong></td>
<td></td>
<td></td>
<td>63 878</td>
</tr>
</tbody>
</table>

#### Capital transfer account

- This account is used to record transactions which relate to:
  - the transfer of ownership of fixed assets
  - transfers of funds associated with the acquisition or disposal of fixed assets
  - debt forgiveness
  - transfers by migrants
- E.g. a grant given by a foreign government for a housing project in SA.

#### Memo item: change in capital transfer and financial accounts including unrecorded transactions

|                                |            |        | 96 485                 |

#### Source: South African Reserve Bank, Quarterly Bulletin, March 2005
The financial account has 5 main components:
- Direct investments
- Portfolio investments
- Other investments – all financial transactions not included in direct or portfolio investments
- Balance of financial account – adding net direct investments, net portfolio investments and net other investments
- Unrecorded transactions – the double-entry accounting system is used to record balance of payments transactions. This means that the net sum of all credit and debit entries should equal the change in the country’s net gold and other foreign reserves. Unrecorded transactions are the errors and omissions that occur when compiling the balance of payments account.

Changes in reserves
- A country’s official reserves consists of:
  - gold
  - special drawing rights (SDR’s) issued by the IMF
  - the country’s IMF reserves position
  - foreign exchange reserves
- In SA the official reserves are called:
  - gold
  - other foreign reserves
  - The change in net gold and other foreign reserves owning to balance of payment transactions is a balancing amount.
- The change in the gross gold and other reserves during a particular period is obtained by adding the following 3 items to the change in the net reserves:
  - change in liabilities related to reserves
  - special drawing rights allocations and valuations adjustments
  - net monetisation (+) or demonetisation (-)
TOPIC 2: FOREIGN EXCHANGE MARKET

Foreign Exchange Market

- A foreign exchange rate is the price of one currency in terms of another.
- A foreign exchange market is a market engaged in the buying and selling of foreign exchange.
- The leading markets are in London, New York and Tokyo.
- In SA the forex market is known as the interbank foreign exchange market.

Differences in currencies

- A typical international transaction requires 2 distinct purchases:
  - foreign currency is bought
  - foreign currency is used to facilitate the international transaction
- The market for a currency is just like the market for any product. There is demand and supply.
- The exchange rate can be defined in 2 ways:

<table>
<thead>
<tr>
<th>The exchange rate is the <strong>domestic price of foreign currency</strong>.</th>
<th>The exchange rate is the <strong>foreign price of domestic currency</strong>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the case of South Africa, this means that the price of a dollar, pound, euro and any other foreign currency is expressed in terms of rands (the domestic currency). For example, R5,00 = $1,00 means that the price of a dollar in terms of rands is R5,00.</td>
<td>In the case of South Africa, this means that the price of the rand (the domestic currency) is expressed in terms of dollars, pounds, euros and other foreign currency. For example, R1 = $0,20 means that the price of a rand in terms of dollars is 0,20 dollar.</td>
</tr>
<tr>
<td>This is known as the <strong>direct method</strong> of quoting the exchange rate.</td>
<td>This is known as the <strong>indirect method</strong> of quoting the exchange rate.</td>
</tr>
</tbody>
</table>

- Terms used to describe changes in exchange rates:
  - An appreciation of a currency – an increase in the value of the domestic currency related to the currencies of other countries, e.g. decrease in rand/dollar from R10,51 to R6,44
  - A depreciation of a currency – a decrease in the value of the domestic currency relative to the currencies of other countries, e.g. increase in rand/dollar from R6,10 to R10,20.

The nature of demand and supply

- Demand for foreign exchange is determined by the following:
  - importing goods
  - services from foreign countries to the country concerned
  - payments of interest and dividend on foreign capital
  - payments of instalment on repayments of overseas loans
  - transfer of capital to foreign countries
  - tourists or representatives spending money in foreign countries
  - other payments to foreign countries
The supply of foreign exchange is caused by the following:
- exporting goods
- providing services to foreign countries
- receiving interest and dividends on capital invested in foreign countries
- in flow of foreign capital
- expenditure of money by foreign powers and tourists
- raising new loans in foreign countries
- other receipts of foreign currencies

The nature of supply and demand for foreign currency:

<table>
<thead>
<tr>
<th>Demand for dollars</th>
<th>Supply of dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>People and institutions wishing to convert rands into dollars. On the foreign exchange market they supply rands and demand dollars. This is a result of:</td>
<td>People and institutions wishing to convert dollars into rands. On the foreign exchange market they supply dollars and demand rands. This is a result of:</td>
</tr>
<tr>
<td>Payments for imports from the USA</td>
<td>Payments for exports from SA</td>
</tr>
<tr>
<td>Buying shares in USA firms</td>
<td>Buying shares in SA firms</td>
</tr>
<tr>
<td>Buying USA assets</td>
<td>Buying SA assets</td>
</tr>
<tr>
<td>People wishing to visit the USA (tourists)</td>
<td>People wishing to visit SA (tourists)</td>
</tr>
<tr>
<td>Repaying debt borrowed from USA</td>
<td>Repaying money borrowed from SA</td>
</tr>
</tbody>
</table>

Changes in the exchange rate

- The exchange rate changes whenever the demand or supply of foreign currency changes.
- The impact of a change in demand or supply on the exchange rate is as follows:

<table>
<thead>
<tr>
<th>Change</th>
<th>Impact on exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in demand for foreign exchange</td>
<td>Depreciate</td>
</tr>
<tr>
<td>Decrease in demand for foreign exchange</td>
<td>Appreciate</td>
</tr>
<tr>
<td>Increase in supply of foreign exchange</td>
<td>Depreciate</td>
</tr>
<tr>
<td>Decrease in supply of foreign exchange</td>
<td>Appreciate</td>
</tr>
</tbody>
</table>

Interventions in the markets

- Government often intervene when a currency is either overvalue or undervalued:
  - **Overvalued:** A country’s currency is valued too high. E.g. ZAR is R6 rather than R7 to the US dollar. This happens when there are continuous deficits in the current account of the balance of payments.
  - **Undervalued:** A country’s currency is valued too low. E.g. ZAR is R8 rather than R7 to the US dollar. This happens if there are continuous surpluses in the current account of the balance of payments.
• Three methods of intervention:
  o **Free-floating exchange rate system** – in this system the forces of supply and demand determine the exchange rate and government does not intervene in the market with exchange rate fluctuations occurring as market conditions change. (Currently used in SA.)
  o **Fixed exchange rate system** – under this system government fixes the exchange rate at a certain level and then ensures that the exchange rate at the set level, requiring the government to buy or sell foreign exchange to maintain the exchange rate at the level it has set.
  o **Managed floating exchange rate system (direct intervention)** – under this system the exchange rate is allowed to fluctuate between certain limits (set by government) as conditions of supply and demand change, government only intervene when the exchange rate moves outside the limits set by buying and selling foreign exchange. E.g. the central bank (SARB) wish’s to maintain the exchange rate at R6 = $1. Assume further that an increase in demand of dollars take place. This could be because of an increase in demand of imported goods by SA households. In a floating exchange rate system the rand will therefore depreciate and the dollar will appreciate (R8 = $1). To stop this from happening the SARB can intervene in the following way:

Since there is an increase for the demand for dollars from DD to D1D1 and an excess demand for dollars develop, the SARB must supply the necessary dollars to the market to satisfy the demand. An increase in supply curve to S1S1 and the exchange rate is unchanged at R6=$1. So the SARB was able to prevent depreciation of the rand.

The snag is that SARB needs sufficient foreign reserves to be able to do this.
The establishment of foreign exchange rates

- Three exchange rate systems:
  - Free-floating exchange rate
  - Managed floating exchange rate
  - Fixed exchange rate

- **Terms of trade**: The ratio of an index of the country’s export prices to an index of its import prices.
  
  Formula: \[
  \frac{\text{Export price index}}{\text{Import price index}} \times 100
  \]

  \[(\text{Value of exports} = \text{price} \times \text{quantity exported})\]
  \[(\text{Value of imports} = \text{price} \times \text{quantity imported})\]

- SARB QB publishes the term of trade, it is also an index.
- E.g.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports Excluding gold</th>
<th>Exports Including gold</th>
<th>Imports</th>
<th>Terms of trade Excluding gold</th>
<th>Terms of trade Including gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>80.2</td>
<td>68.3</td>
<td>83.9</td>
<td>70.8</td>
<td>95.9</td>
</tr>
<tr>
<td>1997</td>
<td>84.9</td>
<td>73.4</td>
<td>87.1</td>
<td>75.3</td>
<td>101.6</td>
</tr>
<tr>
<td>1998</td>
<td>89.5</td>
<td>80.5</td>
<td>91.2</td>
<td>81.3</td>
<td>103.6</td>
</tr>
<tr>
<td>1999</td>
<td>91.9</td>
<td>86.6</td>
<td>85.6</td>
<td>86.9</td>
<td>94.9</td>
</tr>
<tr>
<td>2000</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>2001</td>
<td>102.7</td>
<td>117.5</td>
<td>101.8</td>
<td>117.0</td>
<td>100.2</td>
</tr>
<tr>
<td>2002</td>
<td>103.2</td>
<td>143.1</td>
<td>102.3</td>
<td>145.4</td>
<td>105.1</td>
</tr>
<tr>
<td>2003</td>
<td>103.0</td>
<td>132.5</td>
<td>101.4</td>
<td>133.2</td>
<td>114.1</td>
</tr>
<tr>
<td>2004</td>
<td>106.3</td>
<td>136.5</td>
<td>104.3</td>
<td>136.2</td>
<td>128.7</td>
</tr>
</tbody>
</table>

*Source: South African Reserve Bank, Quarterly Bulletin, March 2005*

- An improvement in the terms of trade may be the result of the following:
  - An increase in export prices
  - A decrease in import prices
- A deterioration (decrease) in the terms of trade may be the result of the following:
  - A decrease in export prices
  - An increase in import prices
- The two most important reasons for price changes in exports and imports are:
  - Inflation or deflation
  - Currency appreciations or depreciations
SECTION C: HOMEWORK

TOPIC 1: BALANCE OF PAYMENTS

QUESTION 1:  14 minutes

Study the table below and answer the questions that follow:

<table>
<thead>
<tr>
<th>Current account</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise exports</td>
<td>380 950</td>
</tr>
<tr>
<td>Net gold exports</td>
<td>25 340</td>
</tr>
<tr>
<td>Service receipts</td>
<td>85 050</td>
</tr>
<tr>
<td>Income receipts</td>
<td>29 300</td>
</tr>
<tr>
<td>Less: Merchandise imports</td>
<td>420 600</td>
</tr>
<tr>
<td>Less: Payments for services</td>
<td>75 000</td>
</tr>
<tr>
<td>Less: Income payments</td>
<td>55 300</td>
</tr>
<tr>
<td>Current transfers (net receipts)</td>
<td>-11 350</td>
</tr>
<tr>
<td>Balance on current account</td>
<td>?</td>
</tr>
</tbody>
</table>

1.1 Calculate the trade balance. (8)
1.2 Calculate the balance on the current account. (3)
1.3 What is the purpose of the balance of payments? (3)
1.4 What does SDR stand for? (3)
1.5 Name three items that are reflected under direct investments. [23]

QUESTION 2:  16 minutes (Source: Focus Study Guide)

2.1 Define the term 'Balance of Payments Account'. (4)
2.2 Explain the current account. (8)
2.3 Explain what is meant by the term ‘trade balance’. (6)
2.4 Explain the financial account. (8)

[26]

TOPIC 2: FOREIGN EXCHANGE MARKET

QUESTION 1:  5 minutes

Calculate the terms of trade for the following periods.

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of export prices</th>
<th>Index of import prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>104</td>
<td>96</td>
</tr>
<tr>
<td>2007</td>
<td>103</td>
<td>98</td>
</tr>
</tbody>
</table>

(4 x 2) [8]
QUESTION 2: 9 minutes  
(Source: X-kit Economics)

Assume the following exchange rates are applicable:

<table>
<thead>
<tr>
<th>Rands</th>
<th>Dollars</th>
<th>Yen</th>
<th>Pounds</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>R8</td>
<td>$1</td>
<td>¥12 000</td>
<td>£0,5</td>
<td>€3</td>
</tr>
</tbody>
</table>

The following prices are quoted to you in South Africa:
- One motherboard costs $2 in the USA
- One motherboard costs £1,50 in the UK
- One motherboard costs ¥20 000 in Japan

From which country would South Africa import motherboards? Show all your calculations.

QUESTION 3: 10 minutes  
(Source: X-kit Economics)

Define the following:

3.1 Floating exchange rate  (4)
3.2 Nominal rates of exchange  (4)
3.3 Revaluation  (4)
3.4 Depreciation  (4)

SECTION D: SOLUTIONS AND HINTS TO SECTION A

TOPIC 1: BALANCE OF PAYMENTS

QUESTION 1: 4 minutes  (Taken from DoE Exemplar 2008)

- Current account ✓✓
- Capital transfer account ✓✓
- Financial account ✓✓
- Official reserve account ✓✓  (3 X 2) [6]

QUESTION 2: 12 minutes  (Taken from DoE Nov 2008)

2.1 Balance of payments is a record of the value a country’s transactions with the rest of the world ✓✓ for a specific period ✓✓ / A record of a country’s imports and exports ✓✓ for a specific period ✓✓  (3)

2.2 • capital transfer account / capital account ✓✓✓
   • reserves account ✓✓✓  (Any 1 x 3)

2.3 Portfolio investments ✓✓✓  (3)

2.4 Historical importance of gold to South Africa ✓✓✓ / a major earner of foreign exchange. ✓✓✓  (Any 1 X 3)
2.5 Inflows:
- 398 532 m ✓
- + 35 470 m ✓
- + 81 353 m ✓
- + 40 234 m ✓
= 555 589 m ✓

Outflows:
- 476 545 m ✓
- + 96 950 m ✓
- + 75 990 m ✓
- + 18 494 m ✓
= 667 979 m ✓

555 589 m - 667 979 m = -112 390 m ✓

OR

398 532 m ✓
+ 35 470 m ✓
+ 81 353 m ✓
+ 40 234 m ✓
- 476 545 m ✓
- 96 950 m ✓
- 75 990 m ✓
- 18 494 m ✓
= -112 390 m ✓

(8 x 1)

(Maximum 4 marks, if all amounts have been added) [8]

[20]

QUESTION 3: 12 minutes
(Taken from DoE Feb-March 2009)

3.1 It is a record of all transactions between one country and the rest of the world or record of all transactions relating to goods, services and money across international borders. ✓ ✓ ✓ (3)

3.2 Capital transfer account ✓ ✓
Reserves account ✓ ✓

3.3 Portfolio investment ✓ ✓

(Any 1 x 2) (2)

3.4 Because it is a key export commodity in earning foreign exchange ✓ ✓ ✓ (3)

3.5 Merchandise exports + gold exports – Merchandise imports
(R 399 030 m ✓ + R 35 470 m ✓ - R 476 545 m ✓ = - R 42 045 ✓ ✓ ✓

(5)

3.6
- Reduction of gold and foreign reserves. ✓ ✓ ✓
- Increase in liabilities related to reserves/borrowing money to offset the deficit. ✓ ✓ ✓
- Exerts pressure on the financial account in that net inflows of money are required. ✓ ✓ ✓ (Any 1 x 3) (3)

3.7
- Depreciate a country's currency. ✓ ✓
- Decrease in aggregate demand. ✓ ✓ (Increase interest rates, increase in tax rates, and reduction in government spending, Increase tariffs on imports).
- Borrowing from IMF ✓ ✓ (Any 1 x 2) (2)

[20]
QUESTION 4: 30 minutes  

(Taken from DoE Feb-March 2010)

INTRODUCTION
The balance of payments is a record of all transactions between one country and the rest of the world.  

(Accept any other relevant introduction)  

(Max 3)

BODY
It consists of FOUR accounts: viz.

1. The Current Account
   - Merchandise (goods) imports and exports
     - It includes transactions in movable goods that change ownership between S.A. residents and non-residents.
   - Net Gold exports
     - Shows net foreign gold sales + the change in gold of the SARB.
     - It is indicated as a separate item because of its importance to SA in earning foreign exchange and is the world’s largest producer of gold.
   - Services receipts and payments
     - This includes transportation, travel, financial, insurance, professional, technical, recreational etc. services between South African residents and non-residents.
   - Income receipts and payments
     - Income receipts refers to income earned by South African residents in the rest of the world and income payments income earned by non-residents from South African, e.g. salaries, dividends etc.
   - Current transfers
     - This involves transfers from SA residents to non-residents and vice versa.
     - They include donations gifts, social benefits and taxes.
     - This figure can be negative or positive.
     - A surplus or deficit may occur on the current account balance, depending on outflows and inflows of money.  
     
     (Max 12)

2. The Capital Transfer Account
   - The balance shown reflects the net amount. This amount can be either negative or positive.
   - The capital transfer account includes:
     - Transactions and grants relating to the ownership of fixed assets and other asset transfers by migrants.

(Max 3)

3. The Financial Account
   - THREE categories in the Financial Account:
     - Direct investments
       - Include transactions relating to investments in foreign businesses (10%+) and fixed property.
     - Portfolio investments
       - Consist of equities (ordinary shares) and debt securities (bonds or gilt-edged shares) that are not part of direct investments.
       - These investments are mainly affected through stock exchanges.
• **Other investments:** ✓
  - Consist of transactions that cannot be classified as direct investments, portfolio investments or reserves ✓✓ (4th account of BoP). E.g. trade credits, loans, currency and deposits. ✓
  - With regard to each of the above liabilities, assets and net amounts are shown. ✓✓ - Liabilities that are obtained from abroad, e.g. loans are positive on the South African BoP because it means that money flows into the country. ✓✓
  - If assets are obtained abroad it is a negative because it means that money flows out of South Africa. ✓✓
  - However, it would be the opposite effect on the BoP if foreigners obtained assets (positive) in South Africa. ✓✓

**Unrecorded transactions ✓:** This is an entry that is used to capture the effects of errors, omissions and timing differences ✓✓

(Max 10)

4. **The Reserves Account**

- South African foreign reserves include gold, Special Drawing Rights (SDR’s), the reserve position at the International Monetary Fund (IMF) and foreign exchange currencies. ✓✓
- These are liquid assets available for financing deficits due to BoP transactions. ✓✓
- South Africa’s reserves are not shown in BoP account because it represents a stock. ✓✓
- The BoP shows flows only; therefore only changes to gold and foreign reserves are shown. ✓✓
- Deficits due to BoP transactions decrease reserves and surpluses increase reserves. ✓✓

(Max 5)

Body maximum: 30

**Correction of Balance of payments deficit**

Using methods, which will reduce imports and promote exports, can reduce deficits. The following ways can be considered:

1. Borrowing money from the IMF ✓✓
2. Policies of export promotion an import substitution ✓✓
3. Increase in aggregate supply will reduce prices. Exports are promoted through cheaper prices. ✓✓
4. Higher interest rates help to decrease spending on imports. ✓✓ Increase in import tariffs and controls, although SA complies with policies of the WTO to reduce its import controls. (Trade liberalisation) ✓✓
5. Exchange control that allows central banks to ration foreign exchange. ✓✓
6. Currency depreciation/devaluation makes imports expensive (reduction) exports cheaper for foreign countries. (increase exports) ✓✓
7. Increase in tax which reduces disposable income which decreases demand in imports. ✓✓
8. Reduction of reserves by SARB to correct deficits if we adopted a managed floating exchange rate. ✓✓

(Max 10)

**Conclusion**

The Balance of Payments will always play an important role in the economy of our country, because it clearly shows the contribution of each component (account) and in case of a deficit, which problem we will have to address. ✓✓

(Max 2)

TOTAL: 50
TOPIC 2: FOREIGN EXCHANGE MARKET

QUESTION 1: 4 minutes (Taken from DoE Nov 2008)

- Fixed ✓✓
- Free floating / flexible ✓✓
- Managed floating / Controlled floating ✓✓  
  (2 x 3) [6]

QUESTION 2: 4 minutes (Taken from DoE Nov 2009)

- Importing goods / purchasing of foreign goods ✓✓
- Services from foreign countries to the country concerned, e.g. shipping, insurance ✓✓
- Payment of interest and dividends on foreign capital ✓✓
- Transfer of capital to foreign countries ✓✓ / Foreign investments / Placing a deposit with a foreign bank ✓✓
- Foreign currency speculations by local residents ✓✓
- Tourists' / officials spending money in foreign countries ✓✓
- Payment of instalments on repayments of overseas loans ✓✓
- Primary income outflows ✓✓
- Purchase of ZAR by the SARB ✓✓
- Other payments to foreign countries ✓✓  
  (Any 3 x 2) [6]

QUESTION 3: 6 minutes (Taken from DoE Nov 2010)

3.1  Export prices X 100

Import prices
105 ✓ x 100 = 103,9 ✓ / 104 ✓
101 ✓
  (3)

3.2  Indicates that a country is poorer since greater volumes of exports to be
produced to afford the same value of imports / A decrease in export prices / an increase in import prices ✓✓  
  (2)

3.3  2005 ✓✓  
  (2)

3.4  The terms of trade increased from 2005 – 2010 ✓✓ An increase in the terms of
trade indicates an improvement in the welfare ✓✓ of the country since fewer exports
are needed to buy the same amount of imports. ✓✓
Accept any other relevant facts.  
  (Max 3) (3) [10]

QUESTION 4: 10 minutes (Taken from DoE Feb-March 2009)

1. Natural resources - are not evenly distributed over the surface of the earth, therefore, they can be traded with countries that lack such resources. ✓✓
   e.g. South Africa is well endowed with natural resources such as gold, platinum, diamond etc. ✓✓

2. Climate - many crops can only be cultivated in certain climatic conditions and in certain types of soil ✓✓
   e.g. Brazil is the largest producer of coffee in the world ✓✓
3. **Labour resources** - are not the same everywhere ✓✓
   *Some individuals* have greater ability and aptitude for certain tasks ✓✓
   Some countries have developed and perfected a particular *skill and aptitude* for the production of a certain commodity, therefore, their skills will be imported ✓✓

4. **Technology / Capital** - is not always easily obtained in every country ✓✓
   *Developed countries* usually enjoy an advantage over underdeveloped countries ✓✓
   Owing to lack of capital, countries cannot produce all products they wish to produce / *Underdeveloped countries* import capital from developed countries ✓✓

5. **Mass production / Specialisation** - Because of specialisation, countries take *advantage of economies of scale* ✓✓ and produce at a *lower unit cost* ✓✓

6. **Cost differences / opportunity cost** – Goods and services can be *produced at a lower cost* in one country in relation to another ✓✓
   The law of *comparative cost* states that nations will find it profitable to trade with other countries when they have different alternative cost ratios ✓✓
   Countries tend to trade when it appears that the cost of the trade is less than the benefits gained ✓✓

(Any 4 x 4) [16]

**QUESTION 5:** 6 minutes *(Taken from DoE Nov 2010)*

5.1 At point e / e / at the point where DD intersects SS / at a price of R10 and a quantity of 100 ✓✓ (2)

5.2 Increased ✓✓
   Reasons:
   • Increase in the number of South Africans visiting USA ✓✓
   • South Africans buy more American financial assets. ✓✓
   • Increased imports from the USA. ✓✓
   • Increased exports to South Africa. ✓✓
   • Services (shipping, insurance) from USA. ✓✓
   • Payments of interest and dividend on foreign capital. ✓✓
   • Payment of instalments on repayments of overseas loans. ✓✓
   • Other payments to foreign countries, which take place from time to time. ✓✓
   • Foreign currencies speculations ✓✓
   • (Accept any other country using the dollar as currency) (Any 1 x 2) (4)

5.3 Depreciated/Decreased ✓✓
   Motivation:
   • Increased demand for dollars ✓✓ OR
   • Decreased demand for rand ✓✓
   • More rand for dollars ✓✓
   • More expensive to buy dollars ✓✓
   • One dollar cost R12,00 instead of R10,00 (Any 1 x 2) (4) [10]
SELF-STUDY:

TOPIC 1: ECONOMIC INDICATORS

**Learner Note:** Economic indicators indicate the way in which the economy is moving, and is broadcast daily on television and the radio.

**SECTION A: TYPICAL EXAM QUESTIONS**

**QUESTION 1:** 10 minutes  
(Discuss GDP and employment as economic indicators.) [16]

**QUESTION 2:** 30 minutes  
(Taken from DoE Nov. 2010) 
(Discuss and assess the economic indicators as depicted below, in terms of the state of the South African economy.) [50]

**ECONOMIC INDICATORS MEASURE THE PERFORMANCE OF THE ECONOMY**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>R(GDP) - % change</td>
<td>-2%</td>
<td>-6%</td>
</tr>
<tr>
<td>PER CAPITA R(GDP)</td>
<td>R22 622</td>
<td>R23 403</td>
</tr>
<tr>
<td>CPI</td>
<td>9,0%</td>
<td>6,2%</td>
</tr>
<tr>
<td>REPO RATE</td>
<td>10,5%</td>
<td>7,5%</td>
</tr>
<tr>
<td>Gini COEFFICIENT</td>
<td>57,8</td>
<td>57,8</td>
</tr>
</tbody>
</table>

[ economic indicators for South-Africa, Quarterly Bulletin SARB, June 2009 ]
QUESTION 3: 12 minutes  (Taken from DOE Exemplar 2008)

3.1 What role does the person talking in the cartoon play in the South African economy?  
(3)

3.2 Name any TWO institutions responsible for publishing statistics in South Africa.  
(4)

3.3 Why, in your opinion, was there a change in the way the economy is measured?  
(3)

3.4 Who is involved in the international standardisation of economic indicators? Name any TWO organisations.  
(4)

3.5 State any TWO uses of real per capita GDP figures.  
(6)

QUESTION 4: 30 minutes  (Taken from DOE Exemplar 2008)

Analyse the information in the table below and evaluate South Africa’s growth and development policies in terms of international best practice in a formal letter to the Minister of Finance.  
[50]
QUESTION 5: 12 minutes  
(Taken from DOE Nov 2008)

South Africa in the process of change

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>1994</th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP (% increase)</td>
<td>3.2</td>
<td>4.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Real per capita GDP (% increase)</td>
<td>1.1</td>
<td>2.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Inflation: CPI (%)</td>
<td>9.0</td>
<td>5.3</td>
<td>3.4</td>
</tr>
<tr>
<td>CPIX (%)</td>
<td></td>
<td>7.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Employment (% increase)</td>
<td>0.4</td>
<td>-2.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Exchange rate: rand per US$</td>
<td>3.55</td>
<td>6.94</td>
<td>6.36</td>
</tr>
<tr>
<td>Reserves (% GDP)</td>
<td>3.1</td>
<td>9.1</td>
<td>18.7</td>
</tr>
<tr>
<td>Repo rate (% end of year)</td>
<td>13.0</td>
<td>12.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Budget deficit as % of GDP</td>
<td>5.1</td>
<td>2.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

5.1 Define the term economic indicator.  

5.2 Which economic indicator can be used by the South African Reserve Bank to curb private consumption expenditure?  

5.3 Name ONE institution in South Africa that publishes regular detailed data on some of the most important economic indicators.  

5.4 From December 2002 to December 2006 a big difference between consumption and production occurred. What impact did this phenomenon have on imports?  

5.5 The current account of the balance of payments shows a very strong resemblance (mirror image) to private consumption expenditure (PCE). Give a reason for this.  

5.6 Which production-related economic indicator can be used to establish the performance of the economy in terms of growth? State any TWO uses of this indicator.
SECTION B: ADDITIONAL CONTENT NOTES

ECONOMIC INDICATORS

- **Economic indicator:** A statistic (data) that shows the behaviour of an economic variable, usually over time.

Where do statistics come from?

- Statistics South Africa
- SARB
- Newspapers and financial magazines

GDP (Gross Domestic Product)

- **GDP:** Total value of all final goods and services produced within the borders of a country in one year.
- An increase in GDP will cause economic growth.
- GDP gives us an indication of:
  - Economic growth
    - High economic growth is one of the main economic objectives of a country.
    - An increase in GDP is not *always* an indication of economic growth. It could be because of a rise in prices (inflation).
    - Therefore, instead of working with GDP at current prices, we need to adjust GDP to constant prices (Real GDP).
    - Calculate GDP per capita to calculate whether an increase in economic welfare has occurred, i.e. if an increase in real GDP has kept up with population growth.
  - The relative importance of different sectors of the economy.
  - Compare the contribution of different sectors over time.
  - Comparison of South Africa’s growth to that of other countries.

Full Employment

- The aim of providing everyone who is willing to work at the current wage rate with a job.
- Unemployment rate = \( \frac{\text{Number of unemployed}}{\text{EAP}} \times 100 \)

Factors that have impacted negatively on the South African labour market:

- Slow economic growth
- A drop in the rate of capital formation
- Oversupply of unskilled labour
- Net emigration of skilled labour
- Restructuring of the economy
- Relatively high wages (as compared to inflation)
- Labour legislation
- Influence of the unions
- Labour unrest and strikes
Inflation Rate

- Price stability means that the rate at which prices increase should be as low as possible.
- Usually expressed as the average rate of change in the prices of all goods and services, i.e. the annual rate of change of the economy’s general price level.
- Usually done by using changes in the consumer price index (CPI).

\[
\text{Inflation rate} = \frac{\text{CPI}_{\text{year2}} - \text{CPI}_{\text{year1}}}{\text{CPI}_{\text{year1}}} \times 100
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>CPI</th>
<th>Inflation rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>112</td>
<td>12</td>
</tr>
<tr>
<td>Year 3</td>
<td>120</td>
<td>7.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Weight</th>
<th>Index for (2000 = 100)</th>
<th>Percentage change between 2005 and 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes, cigars and tobacco</td>
<td>1.21</td>
<td>158.0</td>
<td>+8.5</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>3.64</td>
<td>93.8</td>
<td>-5.0</td>
</tr>
<tr>
<td>Housing</td>
<td>20.70</td>
<td>113.8</td>
<td>+1.1</td>
</tr>
<tr>
<td>Fuel and power</td>
<td>3.84</td>
<td>131.9</td>
<td>+2.9</td>
</tr>
<tr>
<td>Furniture and equipment</td>
<td>2.82</td>
<td>115.9</td>
<td>-0.9</td>
</tr>
<tr>
<td>Household operation</td>
<td>4.68</td>
<td>135.1</td>
<td>+5.9</td>
</tr>
<tr>
<td>Medical care and health expenses</td>
<td>6.90</td>
<td>159.8</td>
<td>+6.4</td>
</tr>
<tr>
<td>Transport</td>
<td>13.72</td>
<td>120.0</td>
<td>+8.3</td>
</tr>
<tr>
<td>Communication</td>
<td>2.86</td>
<td>128.4</td>
<td>-2.4</td>
</tr>
<tr>
<td>Recreation and entertainment</td>
<td>3.04</td>
<td>96.7</td>
<td>+0.1</td>
</tr>
<tr>
<td>Reading matter</td>
<td>0.36</td>
<td>130.5</td>
<td>+3.4</td>
</tr>
<tr>
<td>Education</td>
<td>3.38</td>
<td>144.4</td>
<td>+8.2</td>
</tr>
<tr>
<td>Personal care</td>
<td>3.92</td>
<td>131.1</td>
<td>+3.4</td>
</tr>
<tr>
<td>Other</td>
<td>3.26</td>
<td>102.4</td>
<td>0</td>
</tr>
<tr>
<td>CPI: All items</td>
<td>100.00</td>
<td>126.1</td>
<td>+3.8</td>
</tr>
</tbody>
</table>


- CPIX = CPI excluding the effects of mortgage bond interest rates.
- The monetary policy committee of the SARB meets every few months to consider inflationary conditions and to decide on suitable monetary policy options.
- PPI predicts CPI inflation.
- PPI measures prices of:
  - Goods that are produced locally when they leave the factory yard.
Foreign Trade

- Exports serve to stimulate employment and imports serve to widen the choice of consumers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports as % of GDP</th>
<th>Imports as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>27.8</td>
<td>24.9</td>
</tr>
<tr>
<td>2001</td>
<td>30.0</td>
<td>26.1</td>
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<td>2002</td>
<td>32.7</td>
<td>29.1</td>
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<tr>
<td>2003</td>
<td>27.9</td>
<td>26.0</td>
</tr>
<tr>
<td>2004</td>
<td>26.6</td>
<td>27.3</td>
</tr>
<tr>
<td>2005</td>
<td>27.1</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Source: SARB QB, March 2006

- Terms of trade
  - Ratio of export to import prices.

- Exchange rate
  - Changes in an exchange rate affect the prices that are paid for imports and earned by exports.

- Current account balance
  - Deficit could mean that a country is living beyond its means
    OR that the country is developing rapidly
    OR that it has been granted credit by other countries to finance imports
  - Surplus can indicate a strong competitive economy
    OR a deteriorating economy
    OR one with import substitution

Productivity

- Labour productivity: \[ \frac{\text{Real GDP}}{\text{Number of workers unemployed}} \]

- Remuneration per worker
  - Relationship between wages and productivity is crucial to
    - Employers → relates to profits
    - Employees → relates to standard of living

Monetary Conditions

- Money supply
  - M1A = coins and notes in circulation + bank accounts that can be used to make payments
  - M1 = M1A + other demand deposits
  - M2 = M1 + short term deposits + medium term deposits in financial institutions
  - M3 = M2 + long term deposits
  - M3 is the indicator used to set guidelines for the money supply in South Africa by the SARB as part of its monetary policy.
• Interest rates
  o Price of money: charge made for the use of borrowed money.
  o Money is lent or borrowed on financial markets:
    ▪ money market (short term)
    ▪ capital / bond market (long term)
  o Repo rate: SARB sets the repo rate and supplies whatever quantity of money is
demanded by commercial banks at that price.
  o Prime rate: the lowest rate at which a bank will lend money to its best
customers.
  o Nominal interest rates – quoted interest rates
    Real interest rates – interest rates that have been adjusted for inflation
• JSE All Share index: shows what is happening to the overall value of all shares quoted
on the JSE.
  o Dow Jones – New York
  o FTSE – London
  o DAX – Frankfurt
  o CAC40 – Paris
  o Hang Seng – Hong Kong
  o Nikkei – Tokyo
  o NASDAQ – no physical exchange. Trades in technology stocks on networked
computers.

SECTION C: HOMEWORK

QUESTION 1: 17 minutes (Source: Economics For All)

1.1 List three economic indicators used to measure the performance of the economy.  
(6)

1.2 Distinguish between real and nominal GDP.  
(6)

1.3 Name 5 factors that have had a negative impact on South Africa’s labour market.  
(10)

1.4 Distinguish between CPI and CPIX.  
(6)

QUESTION 2: 15 minutes (Taken from The Answer Series)

2.1 Name THREE economic indicators.  
(6)

2.2 Discuss GDP and Full employment as economic indicators.  
(16)
SECTION D: SOLUTIONS AND HINTS TO SECTION A

QUESTION 1: 10 minutes

(Taken from DoE Nov. 2009)

GDP:
- GDP is total value of all final goods and services produced within the borders of a country in one year ✓✓
- Measures total production of an economy ✓✓
- Formula: \( \frac{GDP_t - GDP_o}{GDP_o} \times 100 \)
- Increased GDP will cause economic growth ✓✓
- Gives an indication of:
  - economic growth ✓✓
  - relative importance of different sectors in economy ✓✓
  - South Africa’s economic growth in relation to growth of other countries ✓✓
  - Real GDP measures growth performance of economy ✓✓ / GDP adjusted with price increases ✓✓
  - Real GDP used in forecasting ✓✓ real GDP used to describe business cycles ✓✓
  - Per capita real GDP used to indicate economic development, indicate living standards and compare living standards ✓✓

(Max. 4 x 2)

Employment:
- Full employment refers to aim of providing everyone who is willing to work at current wage rate with a job ✓✓
- Increase employment to decrease loss of production – produce more goods and services ✓✓
- Unemployment is calculated by expressing number of people who are willing and able to work, but do not have a job, as a percentage of the total number of people that are willing and able to work (EAP) ✓✓
- Employment rate – calculated by expressing the number of employed people as a percentage of the EAP ✓✓ / labour force participation rate ✓✓
- Employment is important for the forecasting of trends – employment in the various sectors ✓✓
- As well as the calculations of productivity / unemployment / employment rate ✓✓
- To ascertain economic successes ✓✓

Max. (4 x 2) [16]
QUESTION 2: 30 minutes (Taken from DoE Nov.2010)

INTRODUCTION
A statistic that shows the behaviour of one or other economic variable / Any suitable introduction. ✓✓✓ (Max. 3)

BODY
1. Real Gross Domestic Product (Production)
   - Definition: The GDP is the total value of all final goods and services produced within the borders of a country in one year. ✓✓
   - The GDP measures the total production of an economy. ✓✓
   - An increase in the Real GDP will cause economic growth, which is defined as the annual rate of increase in total production. ✓✓
   - Nominal GDP cannot be used because its magnitude is partly caused by price increases and not by an increase in the physical numbers. ✓✓
   - The real GDP is obtained when the effect of inflation is removed from the data. (GDP-Deflator) ✓✓
   - RGDP is used to describe business cycles. ✓✓
   - An important use of the RGDP is, therefore, to express real aggregate economic activity and to describe the movement of business cycles. ✓✓
   - It is also used in forecasting, e.g. if the index of leading indicators starts to increase after a continuous decrease, it is an indication that the cycle has turned. ✓✓

Assessment:
- The total value of production decreased with 4% over the period 2008/2009. ✓✓
- It is a clear that South Africa’s economy was trapped into a recession. (negative growth for two consecutive quarters) ✓✓
- As a result one will find the following:
  - Increase in the unemployment rate/ layoffs ✓✓
  - Increase number of bankruptcies / debt ✓✓
  - Poor profit margins etc. ✓✓ (Max. 5 x 2) (10)
2. Per Capita Real Gross Domestic product (Standard of living)
   - If the population grows at a faster rate than the economy, everybody may be seen worse off despite increases in the quantities of goods and services. ✓ ✓ (For this reason the per capita RGDP is calculated)
   - Calculation: per capita RGDP = RGDP / population number ✓ ✓
   - The per capita figures are used for three purposes:
     - To indicate economic development ✓ ✓
     - To indicate living standards ✓ ✓
     - To compare living standards ✓ ✓

Assessment:
- As a result of the global and domestic recession, we find ourselves in the position where many people have been laid off and are without income, ✓ ✓
- This will have a negatively impact on the GDP and also on the per capita RGDP. ✓ ✓
- That will indicate a drop in the standard of living and contributes to our growing poverty problem. ✓ ✓

(Max. 5 x 2) (10)

3. Consumer Price Index (Price changes)
   - Consumer price indexes show price changes of a representative basket of goods and services that consumers buy. ✓ ✓
   - The index covers metropolitan and other urban areas. ✓ ✓
   - It is an overall index, and the weights are obtained from the expenditures of different income categories of households. ✓ ✓
   - It is the most comprehensive indicator measuring consumer inflation in South Africa. ✓ ✓
   - It shows changes in the general purchasing power of the rand. ✓ ✓

Assessment:
- The CPI decreases to within the inflation target of 3-6% over the period ✓ ✓
- That means that inflation is, for the time being, under control because of strict monetary measures by the SARB ✓ ✓ and
- The negative perception from consumers of the economy due to the global recession. ✓ ✓

(Max. 5 x 2) (10)

4. Repo rate (Monetary conditions)
   - Interest rates are the main determinant of investment on a macroeconomic scale. ✓ ✓
   - The key rate of interest, on which all other interest rates are founded, is the repo rate. ✓ ✓
   - Interest rates are very important indicators: if they move up, the debt of households and businesses require bigger repayments. ✓ ✓
   - This includes hire purchases and housing and other property loans. ✓ ✓
   - It may be a signal that a downturn in the business cycle is pending. ✓ ✓
   - Means that household incomes may fall as some workers lose their jobs. ✓ ✓

Assessment:
- Against the background of a slowing global and domestic economy and the improved medium-term outlook for inflation, the MPC has decided to reduce the repurchase rate (Repo Rate) ✓ ✓

(Max. 5 x 2) (10)
5. Gini Coefficient (Distribution of income)
- The Gini coefficient is calculated from the information provided by a Lorenz curve. ✓✓
- A Lorenz curve shows the distribution of income among proportions of the population. ✓✓
- The Gini coefficient is, therefore, the ratio of the proportion of the population who live on less than the proportional income. ✓✓
- The value of the Gini coefficient can vary between 0 and 1. ✓✓
- The higher the value the more unequal the distribution of income is. ✓✓

Assessment:
- Gini coefficients for countries with highly unequal distribution are typically between 0.50 and 0.70. It is, therefore, clear that South Africa can be classified as a country, which is highly unequal. ✓✓

(Max. 5 x 2) (10)
(Max. 4 x 10) (40)

CONCLUSION
- Any suitable conclusion ✓✓

(Max. 2) [50]

QUESTION 3: 12 minutes (Taken from Exemplar 2008)
3.1 Minister of Finance ✓✓✓
3.2 SARB ✓✓
    Department of Labour ✓✓
    Stats SA ✓✓
    (Any other relevant institutions) (2 X 2) (4)
3.3 Relative performance of country can be measured (in comparison with other countries) ✓✓✓
    A complicated economy changes throughout – makes measurement changes necessary ✓✓✓
    Method of statistical calculation revised ✓✓✓
    (Any 1 x 3) (3)
3.4 IMF ✓✓
    World Bank ✓✓
    United Nations ✓✓
3.5 Indicate economic development ✓✓
    Indicate living standards ✓✓
    Used to compare living standards ✓✓
    (3 X 2) (6)

[20]

QUESTION 4: 30 minutes (Taken from Exemplar 2008)
(The candidate should be able to give a little background on the growth and development policies of South Africa as part of the first paragraph)

Since 1994, the South African government has pursued international mainstream economic and development policies, making use of both demand-side and supply-side approaches. If the outcomes of these policies are satisfactory, the approaches used in pursuing them would also be satisfactory. ✓✓

The market approach could also be followed where, ✓✓demand factors such as: consumer spending, investment spending, government spending, exports and imports and ✓✓
supply factors such as: natural resources, labour, capital, technology and entrepreneurship are being discussed. Any 4 marks [4]

(In the following paragraphs the candidate should be able to describe the specific policy and then evaluate it against international best practice)

Growth policies: (Any FOUR policies)

Economic growth: √√
South Africa is a developing country; in terms of the World Bank, a lower-middle income country. √√
The average economic growth rate was 3.1 % per year between 1994 and 2005, in comparison to an average of 1 % per year over the previous decade. √√
After the implementation of GEAR (1996), the budget deficit reduced to less than 3 % of the GDP; was accepted as benchmark. √√

Inflation: √√
Inflation decreased continuously from 9 % in 1994 to 3,4 % in 2005. √√
The SARB dropped monetary targets and adopted inflation targets, initially in a 3%-6% range. √√
Interest rates, based on the repo rate, are the main instrument used in the stabilisation policy. √√
The consistently stable budget deficit also had a stabilising effect on the inflation rate. √√

Employment: √√
Employment in the non-agricultural sector of the economy decreased. √√
The GEAR strategy suggested that a climate was needed that was conducive to employment creation by private sector. √√
Labour productivity in the formal economy increased by 4.2 % per year over the 10 years period until 2005. √√
The unemployment rate Increased from 14 % in 1994 to 26.5 % in 2005, yet employment increased – mainly because of informal sector activities. √√

Exchange rate stability: √√
International reserves increased from 3 % of GDP in 1994 to 18.7 % in 2005. √√
The SARB switched from managed floating to a free-floating exchange rate system. √√

2 Marks – Heading 2 Marks – Discussion [16]

Development Policies: (Any FIVE policies)

Macroeconomic policies: √√
The successful implementation of macroeconomic policies is as important for the rich as for the poor. √√
The per capita GDP increased from 1,6 % in 1998 to 3,5 % in 2005.- the standard of living of the whole population improved. √√
Redistribution through the tax system was also successful √√ and has made possible a substantial increase in the distribution of benefits in cash and kind; macro-economic policy benefits, housing and service benefits. √√

Microeconomic policies: √√
Employment in the formal and informal sector increased by about 32 %. (3,6 % per year). from 1996 to 2005, which was higher than the average real growth rate of 3,2 %. √√
Social Policies: ✓ ✓
Almost 34.1% of the South African population is poor in terms of the international benchmark poverty line income ($2 a day) ✓ ✓
Poverty reduction is, therefore, a serious policy matter for the government, with the result that a number of policies focus on basic needs for the poor. ✓ ✓
Such as:
- Social security grants
- Benefits in kind
- Services
- Primary Health care
- Education

Redress: ✓ ✓
International organisations such as the UN, articulate the importance of the empowerment of the indigenous peoples of developing countries. ✓ ✓
The South African government passed both empowerment and affirmative action acts and introduced a range of other measures to ensure redress takes place. ✓ ✓

Black Economic Empowerment (BEE): ✓ ✓
The Broad Based Black Economic Empowerment Act, No.53 of 2003, provides the legal basis for the transformation of the South African economy. ✓ ✓
The speed and extent of empowerment and transformation were agreed upon in terms of so-called charters between government and various industries. ✓ ✓
The DTI published a scorecard that is used to measure progress of businesses and industries which include some of the following elements: ✓ ✓ management and control ✓ ✓
employment equity ✓ ✓ and social responsibility ✓ ✓

Land redistribution and restitution: ✓ ✓
The government aims to redistribute 30% of agricultural land to previous disadvantage individuals and groups. ✓ ✓
By 2004 some 1.5% of agricultural land had been redistributed. ✓ ✓
Some 61% of claims for land restitution had been finalised. ✓ ✓

Affirmative action: ✓ ✓
Affirmative action rules are described in the Employment Equity Act, no 55 of 1998, ✓ ✓ and apply to employers with 50 or more employees or those with an annual income of, e.g., R2 million in agriculture and R10 million in industry. ✓ ✓
QUESTION 5:  

12 minutes  

(Taken from DOE Nov 2008)

5.1 Economic indicator is a statistic (figure) that shows the behaviour of one or other economic variable / economic indicator is a statistic that measures some aspect of the economy ✔✔✔ Accept any other definition. (3)

5.2 Interest rates / repo rate / prime rate ✔✔ (2)

5.3 Statistics SA/Stats SA ✔
   South African Reserve Bank/SARB/central bank ✔ ✔ (Any 1 x 2) (2)

5.4 An increase ✔ ✔ ✔ (3)

5.5 Private consumption expenditure increases beyond the level of GDP – the graphs mirror each other in this aspect because an excessive demand for goods and services will lead to increased imports to meet that demand ✔ ✔ ✔ Any other relevant explanation. (3)

5.6 Real GDP ✔✔✔ / GDP ✔✔
   • used to describe business cycles ✔
   • used in forecasting ✔
   • indicate the importance of different sectors ✔
   • to compare economic growth with different countries ✔ ✔ Any (2 x 2 = 4) + 3 (7)

[20]
SELF-STUDY

TOPIC 2: SOCIAL INDICATORS

Learner Note: It is just as important to know the current statistics for each of these indicators as it is to know them. You must therefore read business newspapers and watch news.

SECTION A: TYPICAL EXAM QUESTIONS

QUESTION 1: 12 minutes  (Taken from DOE Feb-March 2009)

Read the following and answer the questions.

ESKOM INSISTS ON 10% CUT FOR HOMES, OFFICES

Heavy consumers, especially mining groups, have expressed concern about the effects of the power shortages on their operations, and warned of resulting job cuts. Eskom restricted mines to 90% of their power need to stabilise the national grid as it teetered on the brink of collapse. To avert a total blackout in January, mining groups ceased operations for five days, sparking threats of job losses. Gold mines of 3 kilometres and deeper, use 60% of their electricity for ventilation, cooling and pumping activities, meaning that only 40% is used for production. A serious concern is the safety of workers in the mines. Restructuring of mining activities can lead to a reduction of 7 000 job opportunities. Anglo Gold Ashanti, the third largest gold producer in the world, expects a reduction in production of 7%. According to Anglo Platinum, the largest platinum producer worldwide, structural changes are needed over time to incorporate new equipment – the only long-term solution. Threats are coming from different industrial groups. BHP Billiton was considering reducing production by closing part of its smelter in Bayside, Richards Bay, a move that is expected to cost hundreds of permanent and contract jobs. Further increases in the cost of electricity seem inevitable. After talks with Eskom, the regulator has approved a 14,2% electricity price increase. Industry alone should not have to bear brunt of shortages, the utility says. Power utility Eskom could force residential and commercial users to cut their electricity usage unless they voluntarily reduce consumption by 10%, Eskom CEO said yesterday.

[Adapted from: Business Day, 14 March 2008 and Sake-Rapport, 2 March 2008]

1.1 Which social indicator will mostly be affected by power outages? Explain.  (4)
1.2 Which index will mostly be affected by the electricity price increase of 14,2 %?  (3)
1.3 Why do gold mines experience a bigger problem in reducing their electricity consumption by 10% compared to coal mines in South Africa?  (3)
1.4 Why did BHP Billiton threaten to close part of their plant in Richards Bay?  (3)
1.5 What is the main reason for Eskom’s decision to target households and offices, regarding electricity consumption?  (3)
1.6 What impact does load shedding have on South Africa’s economic growth and the balance of payments?  (4)
QUESTION 2: 30 minutes  
(Taken from DoE Feb-March 2010)

"The aim of the Department of Social Development is to ensure the provision of comprehensive, integrated, sustainable and quality social-development services, and to create an enabling environment for sustainable development."  [2006/07 SA Yearbook]

Analyse and discuss the South African key social performance indicators and their uses.  

[50]

QUESTION 3: 6 minutes  
(Taken from DOE Nov 2010)

3.1 Define the term life expectancy.  
3.2 Which province has the highest life expectancy?  
3.3 Give TWO possible reasons for a low adult literacy rate.  

[10]

SECTION B: ADDITIONAL CONTENT NOTES

Social Indicators

Demographics

- Total population
- Birth rates
- Death rates
- Dependency rates

Health and nutrition

- Access to safe drinking water and sanitation
- Number of doctors per 100 000 people
- Life expectancy and infant mortality rates
- In South Africa it is important to consider HIV/ AIDS, TB and Malaria
Education

- Adult literacy rate
- School enrolment ratios
- Average number of years of schooling
- Public expenditure percentage
- Compared to other countries South Africa’s education expenditure percentage is high

HDI (developed by the UN Development Programme)

- Statistics used are:
  - Life expectancy at birth
  - Adult literacy
  - GDP per capita

Housing and services

- Number of houses completed, as measured by the Department of Housing, is an important indication of delivery of services to the disadvantaged.

- Services:
  - Electricity (Percentage of households with access to electricity)
  - Refuse removal
  - Water supply
  - Sanitation

Urbanisation

- Urbanisation: Increase in population numbers of cities and towns.
- Happens because of:
  - natural growth of population
  - migration
  - establishment of new towns
- Important indicator to highlight land allocation and availability of workers

Income distribution

- Gini coefficient
  - From 0 to 1:
    - 1 = uneven distribution of income
    - 0 = even distribution of income
- Head count index
  - Percentage of people living on an income that is less than the poverty line income.

SECTION C: HOMEWORK

QUESTION 1: 15 minutes (Taken from The Answer Series)

2.3 Name THREE social indicators. (6)

1.1 Discuss Education and Urbanisation as social indicators. (16) [22]
SECTION D: SOLUTIONS AND HINTS TO SECTION A

QUESTION 1: 12 minutes  
*(Taken from DOE Feb-March 2009)*

1.1 Services ✓✓
   Eskom provides a service in the provision of electricity ✓✓
   (4)

1.2 Consumer Price index ✓✓✓
   (3)

1.3 Gold mines are deeper than coal mines; therefore they use a greater % of electricity for ventilation cooling and pumping activities ✓✓✓
   (3)

1.4 Lack of structural changes which are needed to sustain production. ✓✓✓
   OR Increased production costs. ✓✓✓
   (3)

1.5 They are the largest consumers of electricity. ✓✓✓
   (3)

1.6 Economic growth will decline due to interrupted production. ✓✓
   Reduction in export goods, e.g. gold, can lead to a deficit on the BoP ✓✓
   (4)
   [20]

QUESTION 2: 30 minutes  
*(Taken from DOE Feb-March 2010)*

**Introduction**

Social indicators are statistics that measure the level of social development and human welfare within a country. ✓✓✓ OR (Any other relevant definition.)  
(Max 3)

**Body**

- The level of a country’s wealth and social development can be measured by means of the Human Development Index (HDI)
- Income distribution of a country is generally measured by the Gini coefficient ✓✓
- If the coefficient is zero, then there is perfect income equality, and if it is one, it is an indication of perfect income inequality ✓✓
- This inequality is related to unequal skills distribution and a high level of unemployment ✓✓

1. **Infant mortality ✓**
   - Measured in terms of number of infants who die before reaching one year of age per thousand live births in a given year. ✓✓
   - In SA in 2002 it was 59 per thousand. ✓✓

2. **Under-five mortality ✓**
   - Measured in terms of probability that a newborn baby will die before reaching the age of five years if subject to present age-specific mortality rates. ✓✓
   - Probability expressed as number per thousand – in SA 95 per thousand in 2002. ✓✓
3. Health expenditure
   • Measured in terms of amount of public and private health expenditure on health care as percentage of GDP. ✖️ ✖️
   • In 2001 SA’s expenditure was 8.6% compared to 10.8 in high income countries. ✖️ ✖️

4. Access to safe drinking water
   • Measured in terms of percentage of population that has reasonable access to safe drinking water treated or uncontaminated. ✖️ ✖️
   • In 2002 87% of SA population had access compared to 64% in Africa. ✖️ ✖️

5. Access to sanitation facilities
   • Measured in terms of percentage of population with at least adequate sanitation facilities that can effectively prevent human, animal and insect contact. ✖️ ✖️
   • In 2002, 67% of South African population had access to improved sanitation. ✖️ ✖️
   • It is an important indicator for the well-being of infants and young children. ✖️ ✖️
   • Two opposite nutrition conditions are relevant, i.e. child malnutrition and overweight children – both important for children under five years of age. ✖️ ✖️

6. Child malnutrition
   • Expressed in 2 ways: weight for age (underweight) and height for age (stunting or dwarfism). ✖️ ✖️
   • Proportion of children underweight is most important indicator of malnutrition. ✖️ ✖️
   • Important to monitor weight because being underweight increases the risk of death and inhibits cognitive development in children. ✖️ ✖️

7. Overweight children
   • Growing concern – there exists an association between obesity in childhood and high prevalence of diabetes, respiratory disease, high blood pressure and psychological and orthopedic disorders. ✖️ ✖️
   • Being overweight can lead to numerous adverse health conditions which affect people’s ability to work and take care of themselves. ✖️ ✖️

(Max 12)

Education:
• A higher ratio of literacy, knowledge and skills among the population is necessary. ✖️ ✖️
• This can be achieved by means of effective and appropriate education and training. ✖️ ✖️
• This will ultimately lead to increased productivity, competitiveness, national wealth and a higher standard of living per capita of the population. ✖️ ✖️
• Spending on education makes up the largest percentage of total government expenditure in South Africa, and is clearly a priority. ✖️ ✖️

Housing and services:
• Housing: A significant proportion of South Africans is poor and cannot afford to buy residential property. ✖️ ✖️
• The government facilitates home ownership by means of a subsidy system and loans from the private sector. ✖️ ✖️
• Factors hindering housing delivering and home ownership in South Africa include: high levels of unemployment and a very skew income distribution. ✖️ ✖️
• **Services:** The General Household Survey was developed to measure the level of development and performance of various government programmes and projects. ✓✓
• One of the purposes of the GHS is to measure development indicators in the country, e.g. access to basic services such as piped water, electricity, refuse removal. ✓✓
• A number of services are vital to enhance people’s lifestyles namely:
  - Electricity – increased from 50% in 1995. ✓✓
  - Refuse disposal – households in SA have access to refuse removal by local authorities once a week. ✓✓
  - Water supply – some 86% of households had access to clean water in 2004. ✓✓
  - Sanitation – some 57.1% of households in SA had access to flush or chemical facilities in 2004. ✓✓

**Urbanisation:**
• Can be described as a worldwide process of transformation whereby communities change from a rural to an urban place of residence. ✓✓
• Urban areas are usually faster growing and are normal feature of economic development. ✓✓
• More employment opportunities exists, higher wages and other perceptions of a better life in the city. ✓✓
• Urbanisation points out to governments and developers that land has to be provided for a variety of purposes and services. ✓✓

(Max 40)

**Conclusion**
From the above discussion it is clear that social indicators play a significant role in South Africa. It is, therefore, of the utmost importance that we should study their uses in depth. ✓✓

(2) [50]

**QUESTION 3:** 6 minutes  
(Taken from DOE Nov 2010)

3.1 Life expectancy is the expected number of years a person would live ✓✓✓

3.2 Western Cape ✓✓✓

3.3 • Lack of education and training ✓✓
  • Ignorance ✓✓
  • Apartheid regime ✓✓
  • Poverty trap ✓✓
Any other relevant reason.

(4) [10]