

SENIOR SECONDARY IMPROVEMENT PROGRAMME 2013



GAUTENG PROVINCE

Department: Education

REPUBLIC OF SOUTH AFRICA

GRADE 12

ECONOMICS

TEACHER NOTES

The SSIP is supported by



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TEACHER NOTES

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SESSION 12**TOPIC 1: KINDS OF INFLATION**

Teacher Note: Make sure the learners understand the definition of inflation and also the different kinds of inflation.

LESSON OVERVIEW

- | | |
|---|------------|
| 1. Briefly introduce kinds of inflation and measures to combat inflation: | 5 minutes |
| 2. Learners answer the questions: | 40 minutes |
| 3. Go through Solutions and Hints with the learners: | 15 minutes |

SECTION A: TYPICAL EXAM QUESTIONS**TOPIC 1: KINDS OF INFLATION**

QUESTION 1: **10 minutes** *(Taken from DOE Exemplar 2008)*

Discuss the causes of demand-pull inflation. (4 x 4) [16]

QUESTION 2: **18 minutes** *(Taken from DOE Feb-March 2010)*

Write an essay on the different kinds and characteristics of inflation. [30]

QUESTION 3: **4 minutes** *(Taken from DOE Nov 2010)*

List any THREE characteristics of cost-push inflation. (3 x 2) [6]

QUESTION 4: **5 minutes** *(Taken from DOE Nov 2010)*

Explain *hyperinflation* and *stagflation*. [8]

QUESTION 5: **8 minutes** *(Taken from DOE Feb/Mar 2011)*

Study the extract below and answer the questions that follow.

NEW FUEL LEVIES

When sources of state income run dry, governments sometimes need to create special taxes to cover the shortfall, for example fuel levies.

South Africa's provinces are empowered to a certain extent by the Constitution to create their own revenue streams.

According to the *Intergovernmental Fiscal Review 2001*, the key objective of provincial taxes is to improve resource allocation, which will provide additional revenue.

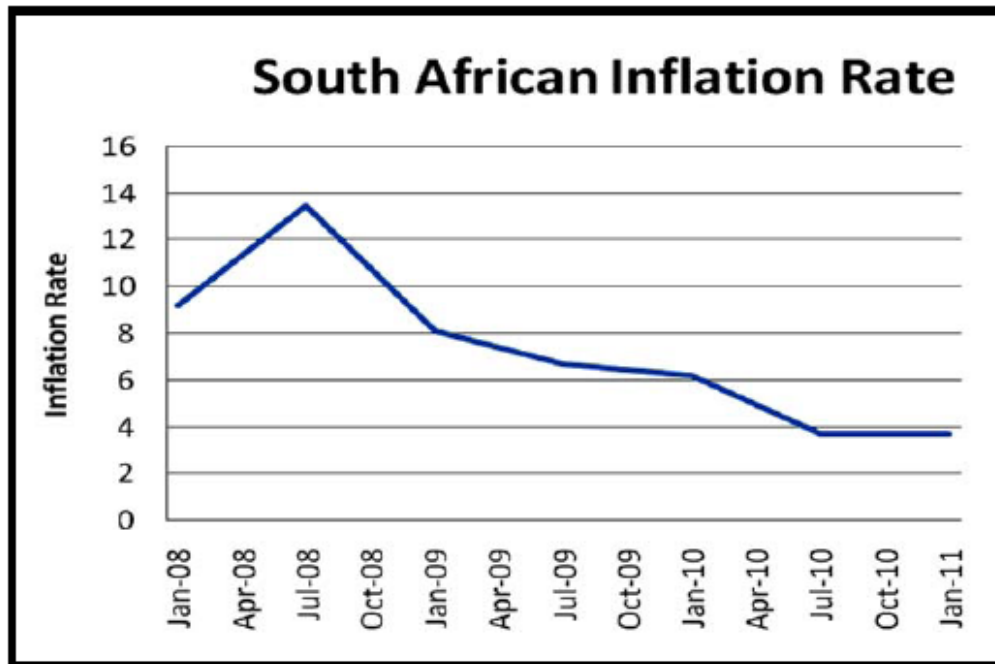
[Adapted: *Financial Mail*, 11 August 2006]

- | | | |
|-----|--|-------------|
| 5.1 | What impact will the fuel levies have on inflation? | (2 x 2) (4) |
| 5.2 | Discuss headline and CPI inflation as types of consumer inflation. | (2 x 4) (8) |

[12]

QUESTION 6:**7 minutes***(Taken from DOE Nov 2011)*

Study the graph below and answer the questions that follow.



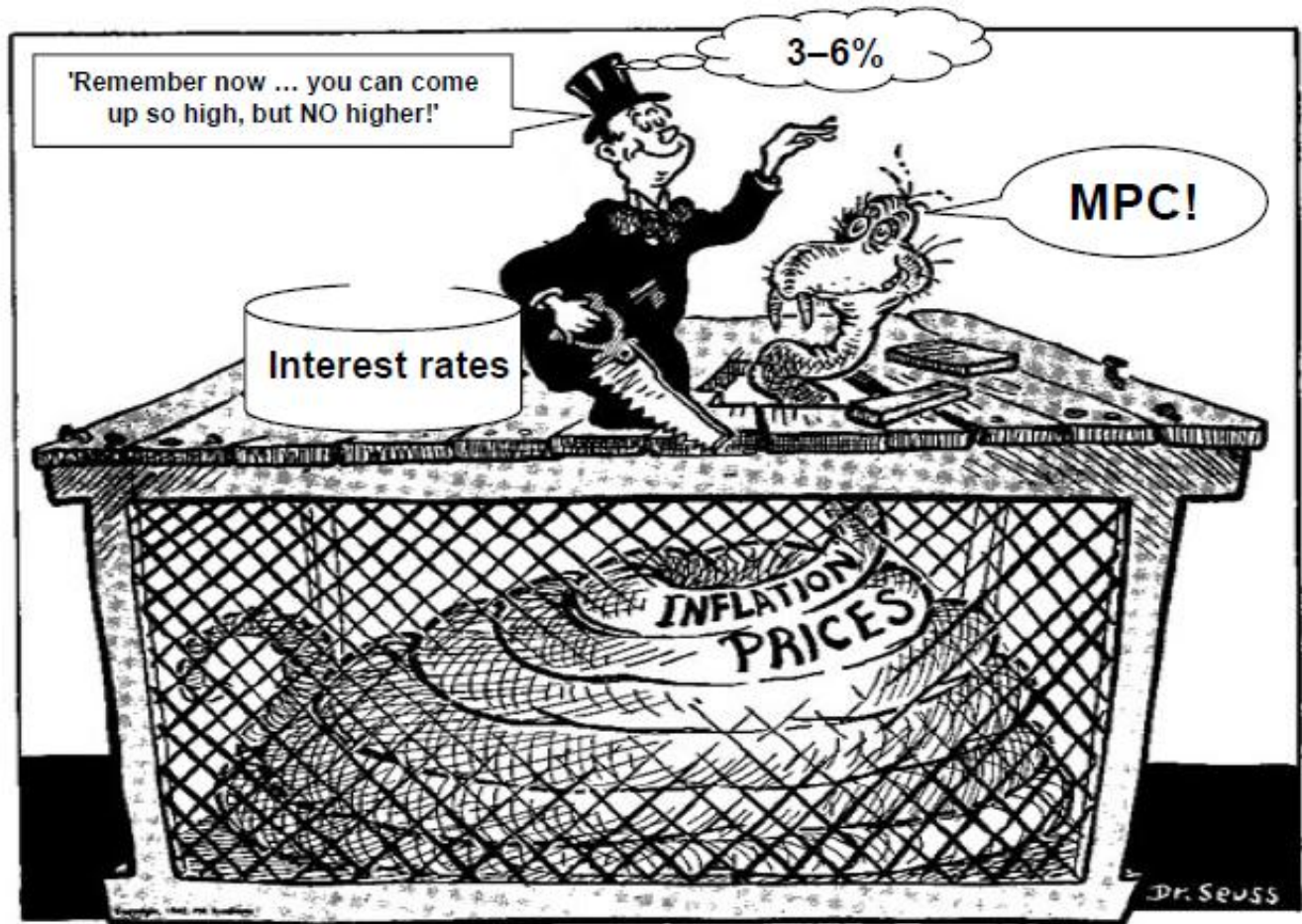
[Source: Internet, February 2011]

- 6.1 What was the trend of the South African inflation rate since July 2008? (2)
- 6.2 What will the effect be on domestic tourism if the inflation rate decreases? (3)
- 6.3 When, according to the graph, were domestic tourists most disadvantaged by the inflation rate? (2)
- 6.4 Does the January 2011 inflation rate comply with the inflation target of South Africa? Give a reason. (3)

[10]

QUESTION 7:**7 minutes***(Taken from DOE Feb/Mar 2012)*

Study the cartoon below and answer the questions that follow.

[Source: Zapiro, *Mail and Guardian*, 2008]

- 7.1 Which institution plays a key role in controlling inflation? (2)
- 7.2 What does the abbreviation *MPC* in the above cartoon stand for? (2)
- 7.3 What rates are used to influence consumer spending? (2)
- 7.4 What does 3–6% refer to? (2)
- 7.5 Which policy is used by the government to control the money supply in South Africa? (2)
- [10]

TOPIC 2: MEASURES TO COMBAT INFLATION

Teacher Note: Revise the fiscal and monetary policy with the learners.

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

Name any THREE groups disadvantaged by inflation. (3 x 2) [6]

QUESTION 2: **30 minutes** (Taken from DOE Nov 2008)

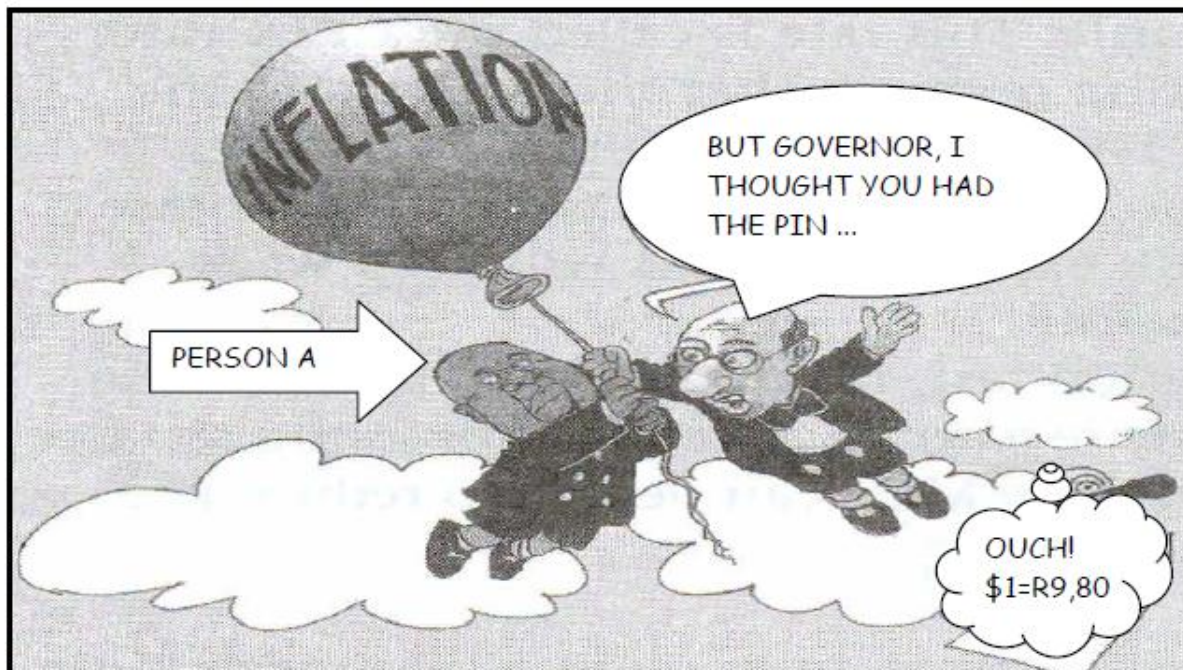
'South Africans are getting stronger. Thirty years ago it took five people to carry fifty rands worth of groceries. Today a child can do it.' (Anonymous)

Write a business letter to the Governor of the Reserve Bank, explaining the causes and impact of inflation on the poorest of the poor. Suggest possible measures to combat inflation.

Address: South African Reserve Bank, PO Box 427, Pretoria, 0001 [50]

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

Study the cartoon below and answer the questions that follow.

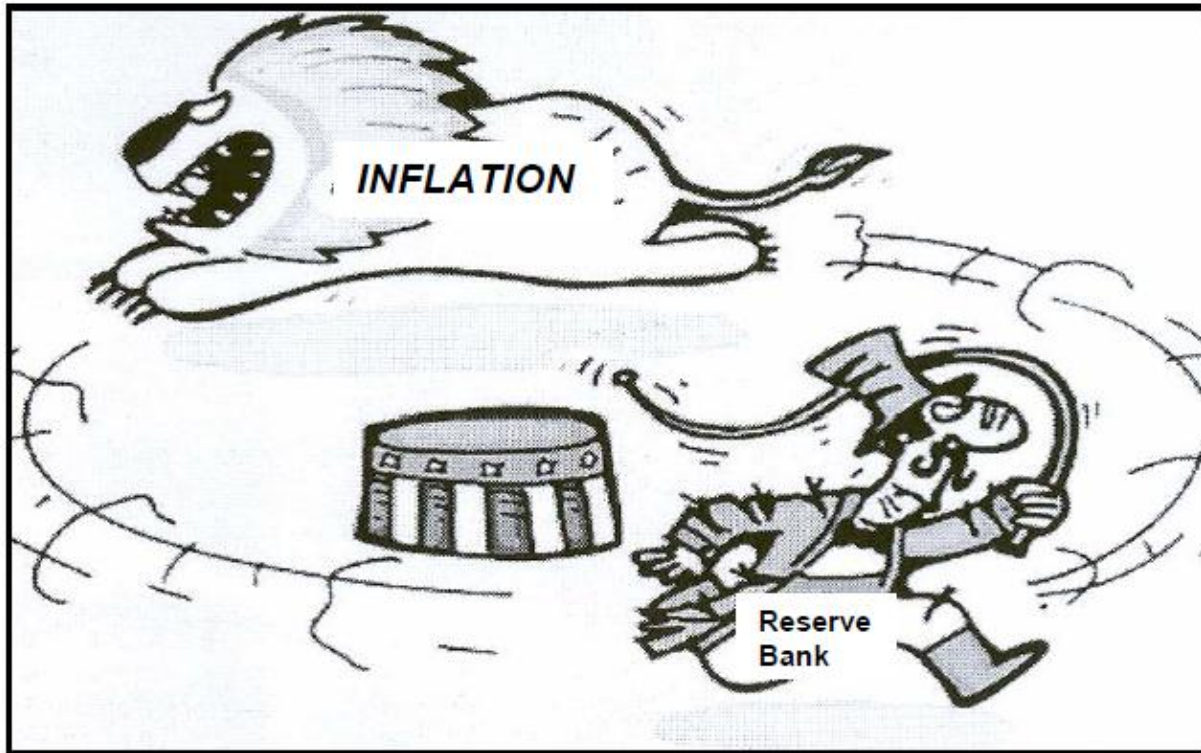


- 3.1 Explain the meaning of the cartoon. (3)
- 3.2 Identify person A in the cartoon. (2)
- 3.3 What type of policy will the South African Reserve Bank use to control the above situation? (3)
- 3.4 With reference to the cartoon, what would be the likely cause of inflation? (3)
- 3.5 Which institution is responsible for the calculation of inflation rates? (3)
- 3.6 Explain the positive (+) and negative (-) effect of inflation on government tax revenue. (6)

[20]

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

Study the cartoon below and answer the questions that follow.



- 4.1 Describe the message in the cartoon above. (2)
- 4.2 Name ONE instrument of the fiscal policy to combat inflation. (2)
- 4.3 What is the inflation target in South Africa? (2)
- 4.4 Do you think that the inflation target will be attainable? Explain. (4)
- [10]

QUESTION 5:**30 minutes***(Taken from DOE Nov 2011)*

Discuss the causes and consequences of demand-pull inflation.

[50]

SECTION B: SOLUTIONS AND HINTS TO SESSION A

TOPIC 1: KINDS OF INFLATION**QUESTION 1:** 10 minutes (Taken from DOE Exemplar 2008)**Discuss the causes of demand (-pull) inflation**

- *Increased consumption* ✓✓ through less savings ✓✓ reduction in taxes ✓✓ easy access to credit ✓✓
- *Investment spending* ✓✓ lower interest rate improves expectations of businesses – invest more – increase in demand – aggregate demand increases faster than aggregate supply, price rises ✓✓
- *Government spending* ✓✓ infrastructure like capital projects ✓✓ consumption spending on education, health, protection and safety ✓✓ social spending on public works programmes and social grants ✓✓
- *Export earnings* ✓✓ foreign growth: trade with foreign countries bring demand for locally produced goods – demand increases as well as the price ✓✓ commodities demand expands and contracts like business cycles do (4 x 4) [16]

QUESTION 2: 18 minutes (Taken from DOE Feb-March 2010)**Introduction****Definition** – inflation is a sustained and a significant increase in the general price level over a period of time. ✓✓✓

- Price changes in the general price level are measured by means of price indexes. ✓✓✓
- An index shows average changes in price, quantity or value of a group items over a period of time. ✓✓✓
- The inflation rate is calculated by comparing the average of all the monthly indexes in a particular year with the corresponding averages for the previous year. ✓✓✓

(Max 3)

Body**Kinds of inflation****(a) Consumer inflation** ✓

- *CPIX inflation* ✓ - it calculates the inflation rate excluding the effect of mortgage bond (housing loan) interest rates. ✓✓
- *Headline inflation* ✓ - it represents the cost of the shopping basket of goods and services of a typical or average South African household. ✓✓
- *Core inflation* ✓ - excludes items from the CPI basket that have highly volatile prices and items with prices that are affected by government intervention and policy. ✓✓
- *Administered prices inflation* ✓ - these are prices of goods and services that are set by government or controlled by government appointed authorities. ✓✓

(b) Producers inflation ✓ - measured by the production price index (PPI) and measures the cost of production. ✓✓**(c) All-inclusive inflation** ✓ - the implicit GDP deflator is simply the ratio of the GDP at current prices to the GDP at constant prices for a specific year. ✓✓

- (d) **Hyperinflation**✓ - a very high rate of inflation when the levels are rising so rapidly that people are losing confidence in the value of money.✓✓
- (e) **Stagflation**✓ - refers to a condition of stagnation of economic growth (low growth and unemployment) and high rates of inflation.✓✓
- (f) **Deflation**✓ - when prices of goods and services decrease continuously over a long period of time.✓✓ (Max 10)

Characteristics

(a) Demand-pull inflation✓

- There is an exceptionally high demand for goods and services relative to a small supply which results in price increases.✓✓
- Demand-pull inflation occurs when the aggregate total demand for goods and services increases, while the aggregate supply remains unchanged (or the demand increases more than the supply.)✓✓
- Businesses and government also participate in the market on the demand side and are thus also responsible for the increases in the price level.✓✓
- Foreigners contribute to demand-pull inflation because of their demand for goods and services and place a strain on the limited production and supply, hence increasing prices.✓✓ (Max 10)

(b) Cost-push inflation✓

- Is triggered by increases in the cost of production, which push up the general price level of goods and services. ✓✓
- An increase in labour costs (higher wages) is a cost item for the business. The cost is added to the price of goods and services and therefore causes cost-push inflation.✓✓
- Producers also contribute to cost-push inflation through increasing their profits and increasing the purchase prices of their products relatively more than the costs.✓✓
- By increasing VAT, the state can contribute to cost-push inflation.✓✓
- Expensive imported products, especially intermediate goods can increase the price of finished goods.✓✓
- Natural disasters such as floods and droughts and HIV/AIDS can increase the cost of production and the prices of the final products.✓✓ (Max 10)

[30]

QUESTION 3:

4 minutes

(Taken from DOE Nov 2010)

- Sudden decrease in the supply of key inputs / Supply shocks / key inputs (increase in price of oil) ✓✓
- Increase in factor prices/wages (cost of labour) / input costs rise ✓✓
- Sudden rise in interest rates ✓✓
- Deterioration/depreciation in exchange rate ✓✓
- Increase in profits ✓✓
- Increase in taxes / revenue for Government ✓✓
- Increase in the price of imports related to cost of production ✓✓
- Decrease in productivity levels ✓✓
- Natural disasters ✓✓ (Any 3 x 2) [6]

QUESTION 4:**5 minutes***(Taken from DOE Nov 2010)***Hyperinflation:**

- Most extreme form of inflation / runaway inflation / inflation out of control ✓✓
- 50% or more per month ✓✓
- National currency is almost worth nothing ✓✓
- Leads to exchange of goods for goods (barter) – widespread phenomenon ✓✓
- E.g. Zimbabwe ✓✓
- People lose confidence/faith in the economy ✓✓
- It can occur in times of war ✓✓

(Any 2 x 2)

Stagflation:

- Low economic growth rate exists due to strong monetary and fiscal policies to curb high inflation rates ✓✓
- Conditions of high inflation and high unemployment rates at the same time ✓✓
- Occurs in economies that lost the ability to create new jobs ✓✓

(Any 2 X 2) [8]

QUESTION 5:**8 minutes***(Taken from DOE Feb/Mar 2011)***5.1 What impact will the fuel levies have on inflation?**

(2 x 2) (4)

- Inflation will increase ✓✓ transport costs will increase & lead to higher product prices ✓✓
 - Consumer spending will decrease ✓✓ less disposable income ✓✓
 - Shared lift opportunities/ lift clubs ✓✓
 - Knock-out effects ✓✓
 - Accept any other relevant answer.

(Any 2 x 2) (4)

5.2 Discuss headline and CPIX inflation as types of consumer Inflation.• **Headline inflation**

- Measured by the Consumer Price Index (CPI). ✓✓
- Represents the cost of the 'shopping basket' of goods and services of a typical South African household. ✓✓
- The unadjusted CPI inflation rate is also known as headline inflation. ✓✓ (2 x 2)

• **CPI inflation**

- Interest rates are the main monetary instrument used by the SARB to fight inflation. ✓✓
- Main indicator of inflation in its pursuit of the inflation target set by the Reserve Bank ✓✓
- Accept any other relevant facts.

(2 x 2) (8)

[18]**QUESTION 6:****7 minutes***(Taken from DOE Nov 2011)*

- 6.1 Decrease ✓✓ (2)
- 6.2 Domestic tourism should increase ✓✓✓ due to an increase in the buying power of the rand (3)
- 6.3 July 2008 ✓✓ (2)
- 6.4 Yes ✓ Between 3 – 6% / Accept any answer between 3 and 6 ✓✓ (3)

[10]

QUESTION 7:**7 minutes***(Taken from DOE Feb/Mar2012)*

- 7.1 South African Reserve Bank ✓✓ (2)
 7.2 Monetary Policy Committee ✓✓ (2)
 7.3 Interest rates ✓✓ (2)
 7.4 Inflation target ✓✓ (2)
 7.5 Monetary policy ✓✓ (2)
 [10]

TOPIC 2: MEASURES TO COMBAT INFLATION**QUESTION 1:****4 minutes***(Taken from DOE Nov 2008)*

- People on fixed incomes such as pensioners, social grants ✓✓
- Creditors ✓✓
- People who hold money in a bank account or who have savings ✓✓
- People who get wage increases below the inflation rate. ✓✓
- Poor / lower income groups ✓✓
- Unemployed people ✓✓

*(Any 3 x 2) [6]***QUESTION 2:****30 minutes***(Taken from DOE Nov 2008)***(Address of Sender)**

3 Lane Road

EXAM FOUNTAIN ✓

0002

(Date) 12 November 2008 ✓**(Address of Recipient)**

The Governor

SA Reserve Bank ✓

PO Box 427

PRETORIA

0001

*(Structure of formal letter: max 5 marks**Salutation: 3 marks Closing: 2 marks)*

Sir/Madam

INFLATION ✓✓✓ /

Accept any relevant introduction.

CAUSES

1. Increase in the money supply ✓✓
 - A **higher increase in the supply of money** in circulation in the market than in supply of goods and services. ✓✓
 - There is more money available to buy the same goods. ✓✓
 - If the supply of goods does not increase (increase in productivity) sellers will want more money for their goods because buyers are willing to pay more. ✓✓
2. Demand-pull / demand inflation ✓✓
 - Certain causes of demand pull inflation include an **increase in the disposable income of households**. ✓✓
 - Availability of **credit** from banks, credit cards and personal overdrafts, increasing demand. ✓✓
 - An increase in the **economically active population increasing** the demand for more consumer goods. ✓✓
3. Cost-push / cost inflation ✓✓
 - Certain causes of cost-push inflation are supply shocks, such as a **sudden increase in the price of oil**. ✓✓
 - A sudden rise in **interest rates**. ✓✓
 - An increase in factor prices, such as the cost of labour or land. ✓✓ (Max 12)

IMPACT ON THE POOREST OF POOR

1. Purchasing power of money ✓✓
 - Increase in prices e.g. basic foodstuffs, will decrease the purchasing power of money ✓✓
 - Poor people depend on pensions and social grants which does not increase at the same rate as normal wages ✓✓
2. Income and wealth ✓✓
 - The poor suffer most from inflation because their meagre incomes buy continuously less ✓✓
 - Price increases affect people whose incomes are relatively fixed (remains constant). ✓✓
3. Social impact ✓✓
 - Violence and crime will affect society at large ✓✓
 - Health issues like malnutrition, HIV/Aids ✓✓
 - Low standard of living (like lack of housing and basic services) ✓✓
 - Family imbalances ✓✓
 - Accept any other relevant facts (Max 16)

CONCLUSION: MEASURES

1. Monetary policy ✓✓
 - The monetary authorities can raise interest rates and reduce the money supply. ✓✓
 - This raises the cost of credit and also reduces the availability of credit to the various sectors of the economy. ✓✓
 - Various instruments can be used to accomplish this, namely, increasing the bank rate (repo rate) and encouraging savings. ✓✓
 - The monetary authorities can apply moral pressure on financial institutions to be more careful when granting credit. ✓✓
 - The monetary authorities can relax exchange controls as a measure to combat inflation. ✓✓

2. Fiscal policy ✓✓

- The minister of finance uses policies of taxation and expenditure to control inflation ✓✓
- This reduces the demand for goods but also has a negative effect on employment and production ✓✓
- Indirect taxation such as VAT, or customs and excise duties can be increased ✓✓
- Imposing a surcharge (increases imported goods prices) on imported goods can help to control inflation ✓✓
- Protection measures may also be taken to protect local industries against unfair foreign competition ✓✓

3. Structural (supply-side / general / other / non-monetary / non-fiscal) measures ✓✓

- An effective combination of both fiscal and monetary measures is used to combat inflation ✓✓
- Increase in productivity by increasing better teaching and training ✓✓
- Encouraging personal savings, which could increase the supply-side of the economy and reduce demand ✓✓
- Implementing wage restraint policy ✓✓
- Stricter conditions for consumer credit ✓✓
- When the market system (demand side or supply side) does not function properly, inflation is often the "price" we pay. ✓✓
- Curtail borrowings ✓✓
- Selling of retail savings bonds ✓✓
- Loan levies by SARS ✓✓

Closing, e.g.

Yours faithfully ✓

Signature ✓**Name****[50]****QUESTION 3:****12 minutes***(Taken from DOE Feb-March 2009)*

- 3.1 Inflation rate is increasing (soaring) and government wants to intervene in decreasing the inflation rate. ✓✓✓ (3)
- 3.2 Person A – Tito Mboweni / Reserve Bank Governor ✓✓ (2)
- 3.3 Restrictive Monetary Policy ✓✓✓ (3)
- 3.4 Unfavourable (decrease) exchange rate ✓✓✓ (3)
- 3.5 StatsSA ✓✓✓ (3)
- 3.6 *Positive effect* – higher prices leads to increase tax ✓✓✓
Income tax increases because of increased wages ✓✓✓ (Any 1 x 3)
- Negative effect* – drop in productivity leads to unemployment ✓✓✓
which results in less income being taxed ✓✓✓ (Any 1 x 3) (6)

[20]

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

4.1 Inflation is out of control and the SARB is trying to control it. ✓✓ (2)
Accept any other relevant answer.

4.2 • Increased direct taxes ✓✓
• Increased indirect taxes ✓✓
• Reducing government expenditure ✓✓
• Tax rebates to improve productivity ✓✓
• Financing the budget on a non-inflationary basis ✓✓
• A loan levy can be introduced ✓✓
• Imposing a surcharge on imported goods ✓✓ (Any 1 x 2) (2)

4.3 3% – 6% ✓✓ (2)

4.4 Yes ✓✓ e.g. the current inflation figure is within the target range ✓✓

OR

No ✓✓ e.g. continuous interest rate cuts may push inflation above the upper level of the target ✓✓

Accept relevant answer.

(4)

[10]**QUESTION 5:****30 minutes***(Taken from DOE Nov 2011)*

Discuss the causes and consequences of demand-pull inflation.

INTRODUCTION

Demand-pull inflation occurs when aggregate demand for goods and services exceeds the aggregate supply of goods and services ✓✓✓ Demand-pull inflation can be described as a case of “too much money chasing too few goods”

Any other relevant introduction.

(Max 3)

BODY

- **Increase in consumption (C)** ✓✓ income of households increase at faster rate than aggregate supply; ✓✓ Due to:
Less savings; ✓✓ start spending current and accumulated savings. ✓✓
Reduction in taxes, ✓✓ e.g. personal income tax. ✓✓
- **Access to credit** ✓✓ as interest rates decrease, more money is demanded ✓✓ Increase in economic active population ✓✓ has pushed up the demand for many consumer items ✓✓ making more money readily available, e.g. credit cards, overdraft facilities. ✓✓
- **Investment spending** ✓✓ lower interest rates result in improvement in the profit expectations of a business; ✓✓ business invests more and it may lead to an increase in demand for goods and services ✓✓ part of investment, e.g. cement, bricks. ✓✓

- **Government spending** ✓✓ increase without corresponding rise in aggregate supply leads to increase in prices ✓✓ government borrowing money from banks leads to more money in circulation; ✓✓ government spends money on infrastructure, consumption spending and social spending. ✓✓ Consumers have more money to spend but no goods on which to spend their money. ✓✓
- **Export earnings** ✓✓ foreign growth creates demand for locally produced goods ✓✓ sales of exports increase the money supply in the country which increases demand ✓✓ If exports increase, with no increase in domestic production, fewer goods are available in the country. ✓✓
- **Commodities demand** ✓✓ expands and contracts like business cycles do ✓✓
- An increase in the money supply without a corresponding increase in production in proportion to the money supply causes an excess demand. ✓✓

Consequences:

- **Decrease in the buying power of money** ✓✓ consumers buy less with the same amount of money. ✓✓
- **Increase in poverty levels** ✓✓ money is worth less than before, unable to satisfy basic needs as in the past. ✓✓
- **Inflation effects the distribution of income and wealth:** ✓✓ People whose monetary income grows more slowly than the increase in the general level of prices such as interest and rental, are affected negatively ✓✓ Disadvantaged people dependent on fixed income; ✓✓ pensioners hit hard by inflation. ✓✓
- **Psychological influence** ✓✓ consumers would like to spend now because of the fear that higher prices in future will decrease the buying power of their money. ✓✓
- **Negative influence on savings** ✓✓ people who lend money will be affected by high inflation rates; ✓✓ if interest rate received is lower the inflation rate, then the real value of money will decrease. ✓✓
- **Increased unemployment** ✓✓ higher prices will result in decrease in demand which decreases production levels which will increase unemployment. ✓✓
- **Balance of payments problems** ✓✓ increased inflation rate will result in South Africa finding it difficult to sell products on international markets; ✓✓ exports will decrease and shortages will occur on balance of payments. ✓✓
- **Increase in tax income for government** ✓✓ more personal income tax payable to state due to higher salaries caused by inflation. ✓✓
- **Inflation impacts negatively on economic growth** ✓✓ Inflation deprives the monetary unit of its function as a reliable measure of value. ✓✓ The result is that confidence, stability and certainty are undermined over time. ✓✓

- **Benefits debtors to the disadvantage of creditors** ✓✓ Debtors are favoured at the cost of creditors. ✓✓ The original debt was incurred when money had a higher real value, but is repaid in money with a lower real value. ✓✓
- **Stimulates investments** ✓✓ People who invest in negotiable instruments and securities, shares, etc., often benefit from inflation ✓✓ This is because the value of their paper investment may increase more rapidly than the rate of inflation. ✓✓
- **Bring about social and political costs that can be devastating / Industrial and social unrest** ✓✓ Continuously rising prices can make people unhappy and distrustful of one another. ✓✓
- Wage bargaining is often accompanied by strikes and mass actions. ✓✓ These actions can spill over into violence. ✓✓
- **Feeds upon itself and brings about more inflation** ✓✓ Inflation spirals; since people expect inflation to continue, they do things that fuel further inflation = hyperinflation. ✓✓

CONCLUSION

From the above explanation it is clear which factors are influencing demand pull inflation, and besides the fiscal policy, there are other measures to combat inflation. (Max 2)

Use the following assessment grid in conjunction with the above to assess the discussion:

MARKS	INTERPRETATION OF TOPIC	
0	Candidate has shown no understanding of the topic	
1	Candidate has shown some understanding of the topic but has missed important aspects of the topic	(1-15)
3	Candidate has interpreted the topic correctly but has not linked facts to the topic	(16-30)
5	Candidate has interpreted the topic correctly and has linked facts to the topic.	(31-45)
		Max 5 [50]

SECTION C: HOMEWORK

TOPIC 1: KINDS OF INFLATION

QUESTION 1:

17 minutes

(Taken from The Answer Series)

- 1.1 List THREE characteristics of inflation. (3 x 2) (6)
 - 1.2 List THREE types of inflation. (3 x 2) (6)
 - 1.3 Discuss cost-push inflation. (16)
- [28]**

TOPIC 2: MEASURES TO COMBAT INFLATION**QUESTION 1:****17 minutes***(Taken from The Answer Series)*

- 1.1 List THREE 'winners' when inflation is high. (3 x 2) (6)
 1.2 List THREE causes of inflation. (3 x 2) (6)
 1.3 Discuss the fiscal and monetary measures taken to reduce inflation. (16)
 [28]

SECTION D: SOLUTIONS TO HOMEWORK**TOPIC 1: KINDS OF INFLATION****QUESTION 1:****17 minutes***(Taken from The Answer Series)*

- 1.1 It is a continuous process. ✓✓
 It refers to a rise in prices in general. ✓✓
 It involves a considerable increase in prices. ✓✓
 It causes a decline in the purchasing power of money. ✓✓ (Any 3 x 2) (6)
- 1.2 Consumer inflation ✓✓
 Producer's inflation ✓✓
 All-inclusive inflation ✓✓
 Hyper inflation ✓✓
 Stagflation ✓✓
 Demand-pull inflation ✓✓
 Cost-push inflation ✓✓ (Any 3 x 2) (6)
- 1.3 Caused by an increase in the cost of production. ✓✓ Increased costs "push up"
 the price level. ✓✓
 Affected by:
 ○ Wages (increases in wages and salaries). ✓✓
 ○ Increase in price of key imported inputs. ✓✓
 ○ Exchange rate depreciation. ✓✓
 ○ Increase in profit margins. ✓✓
 ○ Decrease in productivity for the same remuneration. ✓✓
 ○ Natural disasters. ✓✓ (16)

[28]

TOPIC 2: MEASURES TO COMBAT INFLATION**QUESTION 1:****17 minutes***(Taken from The Answer Series)*

1.1 Debtors✓✓
 Government✓✓
 Investments with flexible market value.✓✓ (6)

1.2 Increase in the money supply.✓✓
 Increase in the input costs.✓✓
 Market failure.✓✓
 Imported inflation.✓✓
 Weaker exchange rate.✓✓
 Decline in productivity.✓✓
 Trade unions.✓✓
 (Any 3 x 2) (6)

1.3 *Fiscal measures:*

- Increase direct taxes.✓✓
- Increase indirect taxes.✓✓
- Reduce government spending.✓✓
- Introduce measures to increase productivity, e.g. tax rebates.✓

Monetary measures:

- Increase interest rates of banks.✓✓
- Decrease money supply.✓✓
- Decrease availability of credit from banks.✓✓
- Decrease currency control.✓✓

(16)

[28]

SESSION 13

TOPIC 1: EFFECTS OF TOURISM

LESSON OVERVIEW

1. Briefly introduce Effects of Tourism (Topic 1) / Benefits of Tourism (Topic 2): 5 minutes
2. Learners answer the questions: 40 minutes
3. Go through Solutions and Hints with the learners: 1 5 minutes

TOPIC 1: EFFECTS OF TOURISM

SECTION A: TYPICAL EXAM QUESTIONS - TOPIC 1

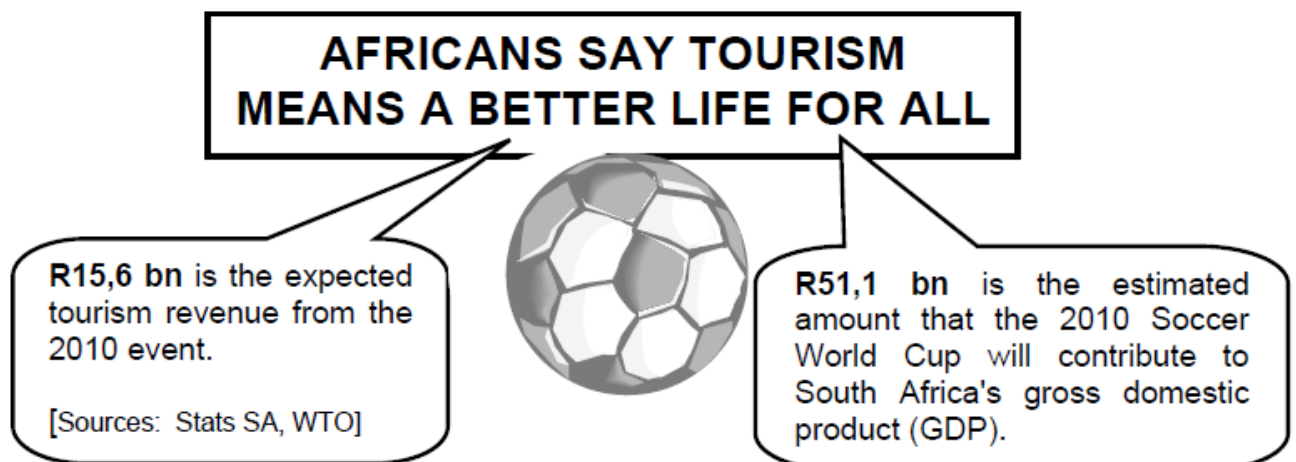
QUESTION 1: 30 minutes (Taken from DOE Exemplar 2008)

'Tourism can be an engine of growth, capable of dynamiting and rejuvenating other sectors of the economy. We must see tourism as a means for a better life for all. Tourism is the world's largest industry and every year it pumps millions of dollars into some of the poorest countries.'

Discuss the effects of tourism on the South African economy, highlighting its impact on GDP, employment, poverty, externalities, the environment and infrastructure. [50]

QUESTION 2: 6 minutes (Taken from DOE Feb/Mar 2011)

Study the information below and answer the questions that follow.



2.1 In your opinion, what may stop tourists from choosing to visit an African destination? (3)

2.2 R51,1 bn is the estimated amount that the 2010 Soccer World Cup will contribute towards the GDP. Refer to the multiplier to state the effect of tourism on the GDP.

(2 x 2) (4)

2.3 Do you agree that tourism will lead to a better life for all? Motivate your answer. (3)

[10]

TOPIC 2: BENEFITS OF TOURISM**SECTION A: TYPICAL EXAM QUESTIONS – TOPIC 2****QUESTION 1:****12 minutes***(Taken from DOE Nov 2008)*

Study the information below and answer the questions that follow.

KEY TO ASGI-SA

'South Africa – are we cool or are we cool!' With these words, South African deputy president, Phumzile Mlambo-Ngcuka, officially opened Indaba 2006, Africa's premier tourism and travel expo, in Durban. In her speech, Mlambo-Ngcuka emphasised tourism's potential to achieve the goals of Accelerated Shared Growth Initiative for South Africa, which are to boost economic growth to 6% by 2010 and halve poverty and unemployment by 2014.

However, the South African government is aware of the importance of an enabling environment for the tourism industry. This includes issues like political stability and a reliable, modern infrastructure. 'We are also working on an airlift strategy that will increase air slots in line with demand. Furthermore, we need an efficient and reliable visa regime. In our case, we are working towards a Southern African Development Community (SADC) uni-visa that will facilitate travel in all of the SADC countries.'

[Adapted from: Indaba, 8 May 2006]

- 1.1 Which macroeconomic strategy of the government is closely linked to tourism? (3)
 - 1.2 According to the above passage, which TWO factors would help to create an enabling environment for tourism? (4)
 - 1.3 What is meant by *uni-visa*? (3)
 - 1.4 Give THREE reasons for growth in the tourism industry in your own words. (6)
 - 1.5 How does tourism benefit households and businesses? (4)
- [20]

QUESTION 2:**10 minutes***(Taken from DOE Feb-March 2009)*

Discuss any FOUR reasons why tourism is of economic importance for South Africa.

[16]

QUESTION 3:**30 minutes***(Taken from DOE Nov 2009)*

Write a business letter to the Minister of Tourism, discussing the benefits of tourism, and how South Africa will benefit from relevant tourism growth policies regarding taxation and infrastructure development.

Address the letter to:

The Minister
Department of Tourism
PO Box 1001
PRETORIA
0001

You are a BEE consultant, S Sithole. Use your own address as a business address. [50]

QUESTION 4:**14 minutes***(Taken from DOE Nov 2011)*

- 4.1 List any THREE examples of ecotourism in South Africa. (3 x 2) (6)
- 4.2 Explain the importance of indigenous knowledge systems in strengthening South Africa's tourism profile. (4 x 2) (8)
- 4.3 Discuss any TWO benefits of tourism for the households. (2 x 4) (8)

QUESTION 5:**30 minutes***(Taken from DOE Feb/Mar 2012)*

Discuss the benefits of tourism to the different sectors in the South African economy. [50]

SECTION B: SOLUTIONS AND HINTS TO SECTION A
TOPIC 1: EFFECTS OF TOURISM**QUESTION 1:****30 minutes***(Taken from DOE Exemplar 2008)***GROSS DOMESTIC PRODUCT (GDP)**

One economic fact about tourism that is certain is the fact that it impacts more on the service industry than on agriculture or manufacturing. ✓✓

Its contribution is direct and indirect:

Direct contribution: ✓✓

Economic developments of the tourism sector is important, its total direct contribution to the economy was estimated at R93,6 bn for 2004, ✓✓ when GDP amounted to R1 387 bn. ✓✓ (according to the World Travel and Tourism Council - WTTC)

This means that tourism contributed 6.8 % in total. ✓✓

Indirect contribution: ✓✓

Tourism is a service-based industry partly responsible for the service sector's growth in South Africa. ✓✓

In developing countries the sector is responsible for around 40 % of GDP, ✓✓ while it is responsible for more than 65 % of GDP in developed economies. ✓✓ In South Africa it is similar to that of developed countries. Services contributed more than 65 % of GDP in 2004. ✓✓

EMPLOYMENT: ✓✓

The WTTC estimated that tourism in South Africa created 1.12 million jobs in 2004.

Tourism is the world largest generator of jobs for the following reasons: ✓✓

It is labour intensive ✓✓

It employs many skills ✓✓

It can provide immediate employment ✓✓

It provides entrepreneurial opportunities ✓✓

POVERTY: ✓✓

Tourism is widely recognised as one of the fastest and more effective redistribution mechanisms in development. ✓✓

It brings development to the poor in rural areas. ✓✓

Many of the prime tourism attractions are located in the rural areas and not in the city centres. ✓✓

It offers opportunities in diverse sources of income for poor people by:

- Allowing them a stake to operate small scale tourism. ✓✓
- Empowering them to exploit opportunities in the job market and other training fields ✓✓
- Creating partnership with mainstream tourism businesses supplying goods or services. ✓✓

EXTERNALITIES: ✓✓

Both positive and negative impacts.

Positive: ✓✓

- Large amounts of revenue ✓✓
- Transportation growth ✓✓

Negative: ✓✓

- Undue environmental damage ✓✓
- Uses resources and produces waste ✓✓
- Short term benefits – negative long-term effects ✓✓
- Pollution ✓✓

ENVIRONMENT: ✓✓

Any form of industrial development impact upon the physical environment in which it takes place. ✓✓

Tourists have to visit the places of production in order to consume the output which created environmental stress. ✓✓

The following are four main categories of stressor activities:

- Permanent environmental restructuring ✓✓
- Waste product generation ✓✓
- Direct environmental stress ✓✓
- Effects on population dynamics ✓✓

INFRASTRUCTURE: ✓✓

An adequate, physical, economic and basic services infrastructure is essential for tourist destination areas, which includes: ✓✓

- Transport infrastructure ✓✓
- Communication infrastructure ✓✓
- Energy infrastructure ✓✓
- Basic services infrastructure ✓✓

[50]**QUESTION 2:****6 minutes***(Taken from DOE Feb/Mar 2011)*

- 2.1 · Political instability ✓✓✓
 · Violence ✓✓✓
 · War/shocks ✓✓✓
 · Crime ✓✓✓

Any other relevant answer

(Any 1 x 3) (3)

- 2.2 · The multiplier describes the fact that changes in spending have an impact on income that is greater than the original change in spending. ✓✓
 · Private consumption spending will increase greatly ✓✓
 · Greater demand for local goods and services ✓✓
 · Leads to an increase in GDP ✓✓
 · Greater volume of exports ✓✓
 · Increase in job creation ✓✓
 · Increase in National Income ✓✓
 · Correction of balance of payments disequilibria ✓✓

(Any 2 x 2) (4)

- 2.3 Yes ✓ e.g. infrastructure development ✓✓
 /No ✓ e.g. not many sustainable jobs created ✓✓
 Accept any other motivation that corresponds with the answer.

(3)

[10]

TOPIC 2: BENEFITS OF TOURISM**QUESTION 1:****12 minutes***(Taken from DOE Nov 2008)*

1.1 Asgi-SA / GEAR ✓✓✓

(3)

- 1.2
- Political stability ✓✓
 - Reliable and modern infrastructure ✓✓
 - Efficient and reliable visa regime / uni-visa ✓✓
 - Airlift strategy ✓✓

(Any 2 x 2) (4)

- 1.3
- a visa that is acceptable to all SADC-countries ✓✓✓
 - a common visa ✓✓✓

(Any 1 x 3) (3)

- 1.4
- An increase in disposable income ✓✓
 - A reduction in working hours ✓✓
 - More awareness of leisure and recreation ✓✓
 - Improved transport, communication and accommodation facilities ✓✓
 - Increases in advertising and promotion ✓✓
 - Awareness of the benefits of holiday and travel ✓✓
 - Ease of obtaining foreign exchange and making payments ✓✓
 - Globalisation ✓✓
 - Any other reason

(Any 3 x 2) (6)

1.5 *Households*

- Increased income ✓✓
- Improved infrastructure ✓✓
- Improved skills ✓✓
- Create job opportunities ✓✓

Any other suitable answer

(Any 1 x 2)

Businesses

- Make a profit ✓✓
- Employment ✓✓
- Entrepreneurial development ✓✓
- BEE ✓✓
- SMME ✓✓
- PPP ✓✓

Any other suitable answer

(Any 1 x 2) (4)

[20]

QUESTION 2: 10 minutes (Taken from DOE Feb-March 2009)

- *Economic growth* ✓✓ contribution is both direct and indirect with an increase in GDP ✓✓
- *Job creation* ✓✓ SA tourism is a high employer of labour per rand of sector income with a projection of 1,2 million people to be employed by 2010 both directly and indirectly ✓✓
- *Foreign currency* ✓✓ spending by tourists means income to households because of salaries and wages they earn through employment ✓✓
- *Development of infra- and superstructures.* ✓✓ Government spends vast amounts on infrastructural development in their endeavour to encourage increasing volumes of tourists ✓✓
- *Poverty relief* ✓✓ through sustainable work opportunities for the poorest communities over the long-term, e.g. walkways, rock art, ablution facilities ✓✓

(Any 4 x 4) [16]

QUESTION 3: 30 minutes (Taken from DOE Nov 2009)**(Address of Sender)**

3 Lane Road
 PRETORIA ✓
 0002

(Date) 12 November 2008 ✓**(Address of Recipient)**

The Minister
 Department of Tourism
 PO Box 1001
 PRETORIA
 0001 ✓

(Max 3)

Sir/Madam

BENEFITS OF TOURISM AND GROWTH POLICIES ✓✓✓**1. Benefits of tourism**

South Africa benefits directly from tourism because of the growth it causes in GDP, government, infrastructure development and exposure to foreigners. ✓✓✓

A major spin-off benefit is foreign exchange earnings. ✓✓✓

(Accept any reference or introduction for **maximum 3 marks**)

(Max 3)

The following sectors benefit the most from tourism:**1.1 Households** ✓✓

Benefit through three main impacts of prosperity:

- They receive income because of salaries and wages through employment ✓✓ and their own endeavours in the tourism industry.
- Most of the infrastructure that is created for tourists is also used by the local people ✓✓
- E.g. roads, hotels ✓
- Tourism requires a number of skills, which require education and training. ✓✓

1.2 Government ✓✓

- The main avenue for governments to benefit from tourism is through the levying of taxes. ✓✓
- These taxes have a dual purpose. ✓✓
- To recover external costs. ✓✓ This cost is recovered from the tourist through adding the taxes to the supply price / normal expenditure taxes (e.g. VAT, excise duties, customs duties). ✓✓
- This amount serves to compensate the host community for providing the infrastructure, public amenities (showers, toilets) to the tourists. ✓✓
- To raise revenue. ✓✓ Tourists are seen as part of the overall tax base ✓✓
- E.g. through airport departures, air ticket taxes and taxes on hotel rooms ✓✓

1.3 Businesses ✓✓

- Economic and basic services infrastructure is usually provided by the public sector. ✓✓
- A superstructure consists of businesses that provide accommodation, transport, and retailing and recreation services. ✓✓
- Tourism also stimulates certain socio-economic objectives such as entrepreneurship development, Black Economic Empowerment and SMME development. ✓✓
- They are normally private sector activities and make up the profit-generating element of a tourist destination. ✓✓
- A combination of public and private sector finance is used to develop destinations. ✓✓
- The public sector also provides a range of financial incentives for private sector tourism investment (grants, subsidies, loans, taxes) ✓✓
- There are also many informal and less traditional opportunities for tourism benefits and these serve as stepping stones for previously neglected groups in the tourism business. ✓✓
- E.g. car rentals, craft curios sales. ✓

1.4 Infrastructure ✓✓

- Adequate and well-maintained physical and basic services infrastructure are essential for tourist destination areas. ✓✓
- Economic infrastructure has been prioritised by Department of Tourism ✓✓
- E.g. accesses to beaches, lakes and rivers) ✓
- Social infrastructure has also been improved ✓✓
- E.g. ambulance services, medicines, and information services. ✓

(Max 28)

2. Tourism growth policies**2.1 Taxation**

- There has been an escalation in the number of countries that are now levying tourist taxes. ✓✓
- These taxes are merely used as a source of revenue. ✓✓
- THE WTTC recommends that these taxes be raised in accordance with the following guidelines. ✓✓
- **Equity** ✓ the taxes should be fair when compared to the other sectors of the economy. ✓✓
- E.g. a plane ticket. ✓
- **Efficiency** ✓ taxes should have a minimal effect on the demand for travel and tourism ✓✓
- E.g. an access fee to nature and game reserves ✓✓
- **Simplicity** ✓ taxes should be simple to pay and administer. ✓✓ They are levied at a flat rate and not a percentage. ✓

(Max 6)

2.2 Infrastructure development

- Roads, basic services are of critical importance for the efficient functioning of the economy. ✓✓
- Infrastructure must be properly maintained for the sake of local citizens, domestic and foreign tourists. ✓✓
- The following basic considerations should be taken into account.
- **Upgrading:** ✓ Where expansion is not possible, upgrading should be done. ✓✓
- E.g. dirt roads should be converted to tarred roads. ✓
- **New technology:** ✓ should be implemented in transport and communications
- This is vital for effective marketing, promotion and distribution of travel and tourism products, services and information domestically and internationally. ✓✓
- **Infrastructure:** ✓ The accessibility and infrastructure of rural areas must be improved. ✓✓
- E.g. secondary roads be maintained and domestic tourism will increase dramatically. ✓

(Max 6)

(Max 40)

Yours faithfully. ✓

_____ (signature) ✓

(Max 2)

S SITHOLE

[50]

QUESTION 4:

2 minutes*(Taken from DOE Nov 2011)*

- Visiting natural areas that are undisturbed ✓✓
 - Drakensberg mountains ✓✓
 - Kruger National Park ✓✓
 - visiting attractions of scenery ✓✓
 - flora and fauna ✓✓
 - vegetation ✓✓
 - forests ✓✓
 - wildlife ✓✓
 - Namaqualand flowers ✓✓
 - enjoying the climate, sunshine, the sea, a river or lake ✓✓
- Any other relevant example of eco-tourism

(Any 3 x 2) **[6]**

QUESTION 5:**30 minutes***(Taken from DOE Feb/Mar 2012)***INTRODUCTION**

Tourism describes the activities of people traveling to and staying in places outside their usual environment for no more than one consecutive year for leisure, business and other purposes ✓✓✓

(Max. 3)

BODY**1. BENEFITS OF TOURISM TO THE DIFFERENT SECTORS IN THE ECONOMY****1.1 Households ✓✓**

- They receive income because of salaries and wages through employment ✓✓ and their own involvement in the tourism industry as tour operators.
- Most of the infrastructure that is created for tourists is also used by the local people ✓✓ e.g. roads, hotels ✓✓
- Tourism requires a number of skills, which require education and training. ✓✓
- Learnerships for a number of skills required by the tourism industry are offered ✓✓ e.g. tour guides, travel agents and chefs ✓✓

1.2 Government ✓✓

- The main avenue for governments to benefit from tourism is through the levying of taxes ✓✓
- These taxes have a dual purpose ✓✓
- To recover external costs ✓✓ This cost is recovered from the tourist through adding the taxes to the supply price/normal expenditure taxes (e.g. VAT, excise duties, customs duties) ✓✓
- This amount serves to compensate the host community for providing the infrastructure, public amenities (showers, toilets) to the tourists ✓✓
- To raise revenue. ✓✓ Tourists are seen as part of the overall tax base ✓✓
- E.g. through airport departures, air ticket taxes and taxes on hotel rooms ✓✓

1.3 Businesses ✓✓

- Economic and basic services infrastructure is usually provided by the public sector ✓✓
- A superstructure consists of businesses that provide accommodation, transport, and retailing and recreation services ✓✓
- Tourism also stimulates certain socio-economic objectives such as entrepreneurship development, Black Economic Empowerment and SMME development ✓✓
- They are normally private sector activities and make up the profit-generating element of a tourist destination ✓✓
- A combination of public and private sector finance is used to develop destinations ✓✓
- The public sector also provides a range of financial incentives for private sector tourism investment (grants, subsidies, loans, taxes) ✓✓
- There are also many informal and less traditional opportunities for tourism benefits and these serve as stepping stones for previously neglected groups in the tourism business ✓✓
- E.g. car rentals, craft curios sales ✓✓

1.4 Infrastructure ✓✓

- Adequate and well-maintained physical and basic services infrastructure are essential for tourist destination areas ✓✓
- Economic infrastructure has been prioritised by Department of Tourism ✓✓
- E.g. accesses to beaches, lakes and rivers) ✓✓
- Social infrastructure has also been improved ✓✓
- E.g. ambulance services, medicines, and information services ✓✓

(Max. 40)

CONCLUSION

From the above discussion it is clear how households, businesses, the government and infrastructure benefit from increased tourism. (Max. 2)

Use the following assessment grid in conjunction with the above to assess the discussion:

MARKS	INTERPRETATION OF TOPIC	
0	Candidate has shown no understanding of the topic	
1	Candidate has shown some understanding of the topic but has missed important aspects of the topic	(1-15)
3	Candidate has interpreted the topic correctly but has not linked facts to the topic	(16-30)
5	Candidate has interpreted the topic correctly and has linked facts to the topic.	(31-45)
		Max 5 [50]

SECTION C: HOMEWORK**TOPIC 1: EFFECTS OF TOURISM****QUESTION 1:****20 minutes***(Taken from The Answer Series)*

- 1.1 Discuss the reasons for growth in SA tourism. (16)
- 1.2 Discuss four effects of tourism. (16)
- [32]

TOPIC 2: BENEFITS OF TOURISM**QUESTION 1:****14 minutes***(Taken from The Answer Series)*

- 1.1. Name three world heritage sites. (6)
- 1.2 Discuss two benefits of tourism. (16)
- [22]

SECTION D: SOLUTIONS TO HOMEWORK

TOPIC 1: EFFECTS OF TOURISM**QUESTION 1:****20 minutes***(Taken from The Answer Series)*

- 1.1 Factors responsible for the growth of *domestic tourism*: ✓✓
- South Africa has a wide range of tourist attractions.
 - Many South Africans cannot afford to travel abroad. ✓✓
 - Improved infrastructure.
- South Africa scores well in terms of *international tourism* competitiveness because of: ✓✓
 - The already well-established network of national parks and private nature reserves are in line with the demands of the increasingly environmentally sensitive visitor.
 - Some companies are already leaders in global best practice in eco-tourism, while others have created Disneyland-like attractions (e.g. Gold Reef City, Sun City). ✓✓
 - The recent successful political transformation in South Africa has opened the country's tourism potential to the rest of the world.
 - The fastest growing sector of tourism is *eco-tourism*. ✓✓ This includes nature photography, botanical studies, bird watching, snorkelling and hiking. ✓✓
 - *Community tourism* is becoming increasingly popular: ✓✓ tourists want first-hand experience of what it is like to live in townships and rural villages. ✓✓ (16)
- 1.2 *GDP* ✓✓
- Tourism impacts *directly* more on the services industry than on agriculture or manufacturing.
 - Although there is an upstream effect, e.g. foodstuffs provided to restaurants and manufacturing providing vehicles, this is the *indirect* effect. ✓✓
 - Estimates for 2005:
 - Direct impact: 3.5% of GDP
 - Indirect impact: 9% of GDP ✓✓
- Employment* ✓✓
- World Travel and Tourism Council (WTTC) figures for 2002:
 - Direct contribution: 3% of the economy's workforce (±492,000 jobs). ✓✓
 - Indirect contribution: 6.9% of the economy's workforce (±1.2 million jobs).
 - But tourism has been affected by a general overall reduction in employment due to:
 - Stricter labour laws that make employers wary of employing new staff because it is difficult to shed unneeded workers later. ✓✓
 - A general worldwide trend towards substituting capital for labour where possible.

Poverty✓✓

- Advantages:
 - Tourism includes many services which are labour intensive and so create employment.
 - Tourism can be seen as an investment by foreigners. ✓✓
 - Owing to BEE and other support schemes, the poorer sectors of society are being increasingly included in the national economy.
- Disadvantages:
 - If tourism is not controlled it can lead to displacement and loss of natural resources.
 - A massive influx can lead to overcrowding and price increases. ✓✓
 - Tourism can lead to socio-economic problems, e.g. prostitution.
 - Establishing resorts, etc under foreign ownership can harm local tourist operators.

Externalities✓✓

- Affected: Mainly individuals✓✓
 Government and collective welfare
 - Type of effects: Economic effects✓✓
 Social effects
 Environmental effects
- (4 x 4) (16)
[32]

TOPIC 2: BENEFITS OF TOURISM**QUESTION 1:****14 minutes***(Taken from The Answer Series)*

- 1.1 Robben Island✓✓
Drakensberg✓✓
Congo Caves✓✓ (6)

1.2 *Households*✓✓

- Households benefit through:
 - Income as salaried employees or owners of businesses. ✓✓
 - Improved infrastructure. ✓✓
 - Skills: tourism requires skills which require education and training. ✓✓

Businesses✓✓

- The most important sectors of the tourism industry are:
 - The tourism development sector (e.g. SATour). ✓✓
 - The travel sector. ✓✓
 - The travel organisers (e.g. travel agents and tour guides). ✓✓
 - The destination sector- the places to which tourists travel. ✓✓
 - The accommodation sector. ✓✓
 - The industrial and commercial sector (e.g. restaurants, shops). ✓✓
 - The attraction sector – tourist entertainment and places to visit. ✓✓
- (2 x 8) (16)
[22]

SESSION 14**TOPIC 1: THE STATE OF THE ENVIRONMENT**

Teacher Note: Sustainable development ensures that development takes place while protecting the use of our resources.

LESSON OVERVIEW

- | | |
|---|------------|
| 1. Briefly introduce The state of the environment (Topic 1) /
Measures to ensure sustainability (Topic 2): | 5 minutes |
| 2. Learners answer the questions: | 40 minutes |
| 3. Go through Solutions and Hints with the learners: | 15 minutes |

SECTION A: TYPICAL EXAM QUESTIONS – TOPIC 1

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

List any THREE forms of pollution. (3 x 2) [6]

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

Discuss *pollution* in terms of environmental sustainability. (4 x 4) [16]

QUESTION 3: **30 minutes** *(Taken from DOE Feb-March 2009)*

The environment is under pressure because human claims on the environment are more than what nature can provide for on a long-term basis. Analyse the state of the environment, highlighting the policy measures by Government to ensure sustainability. [50]

QUESTION 4: **6 minutes** *(Taken from DOE Nov 2011)*

Study the extract below and answer the questions that follow.

CLEAN COAL FOR A SMALL CARBON FOOTPRINT

South Africa is committed to reducing greenhouse gas emissions from its coal-dependent economy by 2025. The minister of economic development suggested the utilisation of underground coal gasification to clean up coal-driven power generation and reduce the country's carbon footprint. In this way we are still using the advantage of coal reserves while developing alternative infrastructure.

According to Ibrahim Patel, South Africa is faced with enormous poverty and unemployment as development challenges, while climate change commitments and the potential of a green economy cannot be ignored.

The Industrial Development Council has set aside R25 billion to support investments in the green economy, which is promoted through green taxes. The government is currently compiling a database of job-spinning projects that are climate friendly in energy, manufacturing, waste-management, ecotourism, agriculture and mining.

[Adapted from Sunday Independent, February 2011]

4.1 Give ONE example of a renewable energy source. (3)

4.2 What is meant by *reducing a carbon-footprint*? (3)

4.3 Explain the concept *green taxes*. (4)

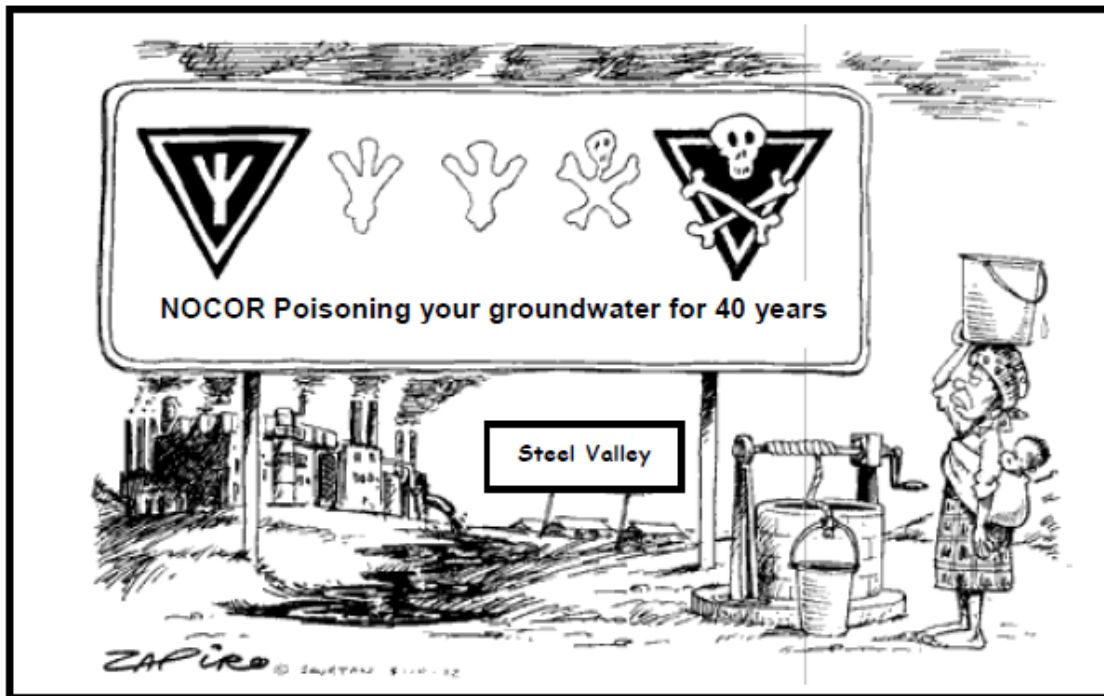
[10]

QUESTION 5:

6 minutes

(Taken from DOE Nov 2011)

Study the cartoon below and answer the questions that follow.



[Adapted from *Mail & Guardian*, 2009]

5.1 Define the concept *pollution*. (2)

5.2 Give ONE example of industrial pollution. (2)

5.3 Why is industrial pollution regarded as a more serious type of pollution? (3)

5.4 What measure, in your opinion, can be put in place to overcome the hazardous effects of poisoned groundwater? (3)

[10]

TOPIC 2: MEASURES TO ENSURE SUSTAINABILITY

Teacher Note: Ensure that learners understand how pollution and the effect of negative externalities can be reduced to sustainable levels.

SECTION A: TYPICAL EXAM QUESTIONS – TOPIC 2

QUESTION 1: **4 minutes** (Taken from DOE Feb-March 2009)

Name any THREE sources of environment-friendly energy. (3 x 2) [6]

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

Discuss any TWO recent international agreements on environmental sustainability. [16]

QUESTION 3: **12 minutes** (Taken from DOE Nov 2009)

Study the extract below and answer the questions that follow.

FISHY BUSINESS

What is happening to the fish that swim South Africa's seas?

Close on to 20 percent of the world's fish stocks are dangerously over-exploited, while many more are over the brink. Sustainability is now a key issue in most spheres of business, equally in fisheries and the seafood trade. It is critical to the long-term existence of seafood stocks (and thus profitability and livelihoods).

Therefore, business should at all times promote and support sustainable fishing practice and responsible aquaculture development. Furthermore, traders of seafood should buy only from legal sources and ensure that their products are fully traceable to a source.

Illegal, unregulated and unreported (IUU or pirate) fishing is probably the greatest threat to fisheries management and sustainable fishing. Not reporting it, makes it difficult to manage fisheries and takes away the livelihoods from people who are rightfully dependent on fish as a resource.

If readers are investors in aquaculture or fisheries, they should only invest in environmentally responsible activities. [Extract from: *Skyways*, October 2008]

3.1 Define the term *sustainability*, as it relates to the environment. (2)

3.2 Name TWO reasons, captured in the extract, why the fishing industry is suffering. (4)

3.3 Explain any TWO types of pollution which will have an impact on the South African fishing industry. (6)

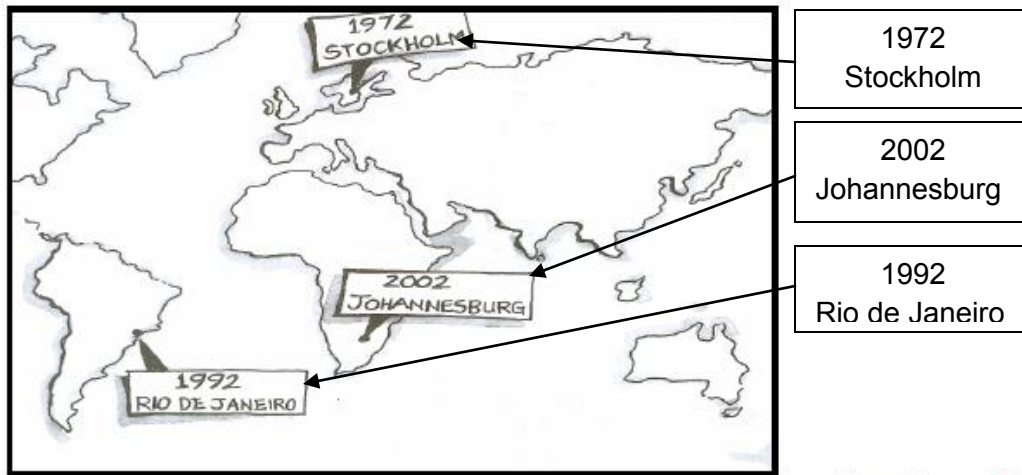
3.4 In your opinion, how can we address environmental sustainability? (4)

3.5 Suggest TWO ways in which illegal fishing can be stopped. (4)

[20]

QUESTION 4:**3 minutes***(Taken from DOE Feb/Mar 2011)*

Since the 1970s international events have been organised to address sustainable development. Discuss decisions taken at any TWO of these events, and indicate how South Africa has tried to implement them.



(2 x 4) (8)

QUESTION 5:**30 minutes***(Taken from DOE Feb/Mar 2011)*

Discuss the measures to ensure environmental sustainability.

[50]**QUESTION 6:****6 minutes***(Taken from DOE Feb/Mar 2011)*

Study the extract below and answer the questions that follow.

THE IMPACT OF NATURAL DISASTERS ON SUSTAINABILITY

Floods in central Europe, wildfires in Russia, widespread flooding in Pakistan, earthquakes and tsunamis hitting Japan, are weather-related natural catastrophes we are dealing with right now. Before the World Climate Summit in November 2010 in Cancun, Mexico, there appeared to be a link between the increasing weather extremes and climate change.

In the last 30 years, there has been a sharp increase in loss, related to weather events. Total economic losses rose from \$50 billion in 2009 to \$130 billion in 2010. A total of 950 natural disasters were recorded in 2010.

56 000 people died in the Russian heat wave and 220 000 from the Haiti earthquake.

[Source: Adapted from *Associated Press*, 4 January 2011]

6.1 Define the concept *environmental sustainability*. (2)

6.2 Which international agreement is referred to in the extract? (2)

6.3 What effect do the natural disasters above have on renewable resources? (2)

6.4 How will earthquakes and tsunamis lead to water pollution? (4)

[10]**QUESTION 7:****5 minutes***(Taken from DOE Feb/Mar 2011)*

Discuss any TWO public sector intervention measures to ensure environmental sustainability.

(2 x 4) [8]

SECTION B: SOLUTIONS AND HINTS TO SECTION A
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TOPIC 1: THE STATE OF THE ENVIRONMENT**QUESTION 1: 4 minutes***(Taken from Exemplar 2008)*

- Air ✓✓
- Water ✓✓
- Land ✓✓
- Residual waste (household waste, obsolete consumer durables and litter) ✓✓
- Production pollution (affects land, sea and atmosphere like acid rain, smoke, gases, toxic chemicals, pesticide contaminants, liquid chemical effluents, noise pollution, scenic degradation and oil spillages) ✓✓
- (Any other suitable facts) (3 x 2) [6]

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

- When people introduce waste matter into the environment, both directly and indirectly ✓✓
- Air pollution ✓✓ is the accumulation in the atmosphere of substances in sufficient quantities that damage human health ✓✓ e.g. power and heat generation, ozone layer depletion ✓✓ climate changes. ✓✓ Fund and Stock pollutants. ✓✓
- Land pollution ✓✓ is the degeneration of the earth's land surface through misuse of soil ✓✓ e.g. poor agricultural practices, mineral exploitation. ✓✓ Will have a negative effect on food production and eco- tourism ✓✓
Pollution has a detrimental effect on the ecosystem. ✓✓
One of the greatest causes of pollution is the high rate of energy used by modern, growing populations. ✓✓
- Water pollution ✓✓ is the introduction into fresh or ocean waters of chemical, physical or biological materials that degrade the quality of the water and affects the organisms that live there ✓✓ e.g. industrial effluents, mining wastages ✓✓
- Noise pollution ✓✓
Excessive amounts of noise pollution will have detrimental effects on all participants in the economy ✓✓

(Listing of facts – maximum 8 marks.) (8 x 2) [16]

QUESTION 3: 30 minutes*(Taken from DOE Feb-March 2009)*

- The environment is under pressure because of **increasing population numbers** as a result of the high birth rates in developing countries ✓✓
- **Excessive consumption** in developed countries is 30% higher than the amount that nature can provide on a sustainable basis ✓✓
- The activities of humans put demands on the natural environment in two ways, through **inputs** ✓✓ (provision of resources) and **outputs** ✓✓ (production of waste).
- Environmental sustainability means the ability of the **environment to survive** its use for economic activity ✓✓

Conservation ✓✓

- Human activities affect the environment, not only because they cause pollution but also because they tend to over-utilise it ✓✓
- Conservation measures are applied in botanical parks, game parks, museums and any place of historical interest ✓✓
- **Charging for the use of the environment** ✓✓ the government levies a fee on consumers and producers for the waste (**solid, liquid, gas**) they produce and dump in the environment. ✓✓ The best results are obtained if these charges are proportional to the waste produced. ✓✓

Education ✓✓ plays a major role in improving people's capacity to manage the environment ✓✓ Pressure groups such as the Green Party and Friends of the Earth have forced industries to encourage managers to integrate environmental responsibility into all their business decision making ✓✓

Preservation ✓✓

- Means to keep something intact ✓✓
- Some resources are not only non-renewable but if lost, are irreplaceable ✓✓
- E.g. ecological systems, heritage sites ✓✓
- Government can intervene in order to preserve environmental assets through subsidies, control measures, or to buy or expropriate certain assets ✓✓
- **Voluntary agreements** ✓✓ rather than imposing laws and regulations, the government can seek to enter into voluntary agreements with businesses for them to cut pollution ✓✓

Externalities ✓✓

- Are the costs and benefits that are captured by market transactions and can be either positive or negative ✓✓
- Negative externalities such as air and water pollution will be oversupplied in the market ✓✓
- If businesses are expected to spend a certain amount of money on equipment that reduces pollution, the expenditure on such pollution abatement (reduction) equipment could provide positive externalities to others. ✓✓
- The major economic role of governments with regard to the environment is to correct the inefficiencies emanating from externalities. ✓✓
- **Environmental taxes** ✓✓ a tax could be imposed on the output (or consumption) of goods, wherever external environmental costs are generated. ✓✓ These are known as **green taxes**. ✓✓ To achieve a socially efficient output, the rate of tax should be equal to the **marginal external cost**
- **Environmental subsidies** ✓✓ an alternative is to provide subsidies for activities that reduce environmental damage ✓✓ The cost to reduce or prevent the harmful effects is recovered from the proceeds of taxation, ✓✓ e.g. encourage production of environment friendly substitutes, such as **unleaded petrol** ✓✓ and to encourage recycling of waste, such as bottles, cans and cardboard ✓✓

[50]

QUESTION 4:**3 minutes***(Taken from DOE Feb/Mar 2011)*

- 4.1 · bio-mass / bio-diesel / bio-gas / bio-fuel ✓✓✓
 · hydro ✓✓✓
 · wind turbines ✓✓✓
 · waves / tidal energy ✓✓✓
 · solar power ✓✓✓
 · fire wood ✓✓✓
 · Any other renewable resource (Any 1 x 3) (3)
- 4.2 · Reduce emission of CO₂ / reducing carbon dioxide (levels of carbon) ✓✓✓ (3)
- 4.3 · Green taxes are taxes on output or consumption which are charged for the adverse effects on the environment / taxes levied on consumers and producers for waste and pollution ✓✓
 · Also known as environmental taxes ✓✓
 · E.g. levied on tyres, gas emission tax, plastic bags ✓✓
 · Any other relevant explanation – maximum 2 marks for examples (2 x 2) (4)

QUESTION 5:**6 minutes***(Taken from DOE Nov 2011)*

- 5.1 Define the concept *pollution*. (2)
 Pollution occurs when people introduce waste matter into the environment, both directly and indirectly, which have a negative impact on human, animal and plant life ✓✓/
 Pollution occurs when the flow of residual emissions resulting from human activity exceeds the natural environment's capacity to absorb them ✓✓
 Any relevant definition (2)
- 5.2 Give ONE example of industrial pollution. (2)
 Smoke / Smog / acid rain / poisonous chemicals / noise / environmental damage / air pollution / contaminated water / poisonous gases ✓✓ (2)
- 5.3 Why is industrial pollution regarded as a more serious type of pollution? (3)
 Large scale production leads to continuous, increased pollution or high rate of pollution / affecting the health of people (life expectancy), animal and plants species ✓✓✓
 Any other relevant fact (3)
- 5.4 What measure, in your opinion, can be put in place to overcome the hazardous effects of poisoned groundwater? (3)
 · Prevention: Policies, legal restrictions and stricter law enforcement ✓✓✓
 · Cure: minimize the negative effects of polluted ground water e.g. purification of water sources ✓✓✓
 · Any other relevant response (Any 1 x 3) (3)

[20]

QUESTION 6:**6 minutes***(Taken from DOE Feb/Mar 2011)*

- 6.1 Environmental sustainability means the ability of the environment to survive its use for economic activity ✓✓ (2)
- 6.2 World Climate Summit/Cancun Summit in Mexico ✓✓ (2)
- 6.3 Natural disasters limit their availability due to the rate at which they can be produced ✓✓ (2)
- 6.4 Earthquakes cause water pipes to burst leading to water shortage ✓✓
Tsunamis destroy fresh water resources/pollute fresh water/cause widespread flooding ✓✓ (4)
- [10]**

QUESTION 7:**5 minutes***(Taken from DOE Feb/Mar 2011)*

Granting property rights ✓✓ ensures that people care for things that belong to them by using them as profitable as possible; ✓✓ if property rights are expanded to common goods, polluters can be charged for the right to pollute. ✓✓

- **Charging for the use of the environment** ✓✓ impose environmental charges – levies, fees on consumers and producers for waste they produce and dump in environment. ✓✓
- **Environmental taxes** ✓✓ taxes imposed on output of good, e.g. taxes charged on items such as tyres will increase the price of tyres. ✓✓
- **Environmental subsidies** ✓✓ for activities that reduce environmental damage – cost to reduce or prevent harmful effects is recovered from proceeds of taxation ✓✓ used for development of new techniques or equipment; ✓✓ encourage production of environment friendly substitutes; ✓✓ encourage recycling of waste. ✓✓
- **Marketable permits** ✓✓ businesses are allowed to pollute by giving them a license to pollute up to a maximum – these licenses can be sold to other businesses if they do not pollute at all. ✓✓

(2 x 4) [8]

TOPIC 2: MEASURES TO ENSURE SUSTAINABILITY**QUESTION 1:** 4 minutes *(Taken from DOE Feb-March 2009)*

- Water ✓✓
- Wind ✓✓
- Solar ✓✓
- Biomass ✓✓

(3 x 2) [6]

QUESTION 2: 10 minutes *(Taken from DOE Nov 2009)***INTERNATIONAL AGREEMENTS**

- 1992: UNCED ✓✓
- 1992: Montreal Protocol on Substances that Deplete the Ozone Layer ✓✓
- 1992: Convention on Biological Diversity ✓✓
- 1992: Framework Convention on Climate Change ✓✓
- 1992: Convention to Combat Desertification ✓✓
- 1996: Habitat II Conference in Istanbul ✓✓
- 1997: Kyoto Protocol on Climate Change in Bonn in Germany ✓✓
- **Earth Summit / Rio de Janeiro** ✓✓
 - Also called the UNCED (United Nations Conference on Environment and Development), held in June 1992. ✓✓
 - Purpose of the Earth Summit was to set a series of objectives and establish and sign a number of conventions and treaties to address the deterioration of the global environment. ✓✓
 - **Agenda 21** as action plan originated from the Earth Summit ✓✓
 - **Agenda 21** outlined detail key issues to ensure sustainable development – including issues like resource management, population growth, health and poverty ✓✓
 - Aimed at the sustainable development and the protection of the environment. ✓✓
 - Main value of the summit is that it made countries across the globe aware of the dangers of unsustainable development for individual countries and the whole world. ✓✓
 - The threat of environmental problems was widely acknowledged and this led to the reduction of global warming. ✓✓ (Max. Any 4 x 2)
- **Johannesburg World Summit on Sustainable Development** ✓✓
 - Largest conference in the country since Rio de Janeiro – 10 years previously. ✓✓
 - Focused on WEHAB – water, electricity, health, agriculture and biodiversity. ✓✓
 - African environmental issues were also highlighted, namely to improve access to clean water and to help fight the HIV/Aids pandemic. ✓✓
 - The Summit was very successful with countries committing themselves to a range of actions, namely improving water and sanitation and addressing the causes of ill health. ✓✓
 - Poverty eradication ✓✓
 - Changing unsustainable patterns of consumption ✓✓
 - Globalisation ✓✓
 - Health ✓✓

• **Kyoto Protocol** ✓✓

- Agreement to deal with the problem of global warming. ✓✓
- It is a guide or action plan that sets targets for developed countries to reduce greenhouse gas emissions by 7% before 2010. ✓✓
- Signed by 141 nations, including all European and other developed countries, the USA and Australia ✓✓
- To achieve this, countries put controls on the emissions of greenhouse gases by their largest polluters who are large companies. ✓✓ (Max. Any 4 x 2) [16]

QUESTION 3:**12 minutes***(Taken from DOE Nov 2009)*

- 3.1 Sustainability – relating to the environment, means keeping the environment intact for future generations/long-term existence/or any relevant answer ✓✓ (2)
- 3.2 Buying from illegal sources ✓✓
- Products not traceable to source ✓✓
 - Pirate fishing ✓✓
 - Mismanagement ✓✓
 - Over-exploitation ✓✓
 - Unregulated and unrecorded fishing ✓✓ (2 x 2) (4)
- 3.3.1 Biological pollution ✓ animal or plant species can change or suffer from ill health due to sewage in rivers / sea. ✓✓
- Chemical pollution ✓ the effects from oil leakages on beaches or waste from a factory. ✓✓
 - Land pollution ✓ includes visible waste and litter as well as pollution of the soil itself. ✓✓
 - Water pollution ✓ any relevant answer relating to sea and fresh water pollution. ✓✓ (6)
- 3.4 Sustainable fishing practices ✓✓
- Responsible aquaculture development ✓✓
 - Education ✓✓
 - More investment in environmental sustainability ✓✓
 - National awareness programme ✓✓ (4)
- 3.5 Illegal fishing fines ✓✓
- Issuing of permits ✓✓
 - Issuing of quotas ✓✓
 - Stricter law enforcement ✓✓ (4)
- [20]**

QUESTION 4:**3 minutes***(Taken from DOE Feb/Mar 2011)***Stockholm Conference:**

- recognised that rapid changes in science and technology, have given human beings the power to transform their environment ✓✓
- both natural and man-made environment are essential to mankind's wellbeing and to the enjoyment of basic human rights ✓✓ (Any 2 x 2)

Rio de Janeiro:

- the Earth Summit established new and equitable global partnership through creation of new levels of co-operation among states, key sectors of societies and people ✓✓
- Agreement that humans are at centre of sustainable development and entitled to healthy and productive life in harmony with nature ✓✓
- Agenda 21: social and economic issues (poverty, consumption patterns, protect and promote health) ✓✓ conservation and management of resources (atmosphere, deforestation, oceans, freshwater resources, wastes) ✓✓
- Rio Plus 5 noted that globalisation made some countries poorer (low level of growth) ✓✓ – what place, share and benefits are there for a global system (Any 2 x 2)

Johannesburg Summit on sustainable development:

- Focus attention on difficult challenges (improving people's lives, conserving natural resources, ever-increasing demand for food, water, shelter, sanitation) ✓✓
 - Divide between rich and poor posed major threat to global prosperity and stability ✓✓ (Any 2 x 2)
- [8]**

QUESTION 5:**30 minutes***(Taken from DOE Feb/Mar 2011)***INTRODUCTION**

- Sustained development means meeting the needs of the present generation without compromising the needs of future generations. ✓✓✓ **OR**
- When pollution levels and environmental degradation are too high and the free market system has failed to bring about an optimal utilisation of the environment, government intervenes or takes control. ✓✓✓

Accept any other relevant introduction.

(Max 3)

BODY**1. Market allocations ✓✓**

- **Market failure** ✓✓
- Environment is a common resource ✓✓
- Many parts of the environment are not privately owned and have the characteristics of non-excludability. ✓✓
- Environmental resources are scarce and there is rivalry in their use. ✓✓
- At a zero price these resources will be overused. ✓✓

- **Externalities** ✓✓
 - Costs are often borne by others ✓✓
 - The greater these external costs, the lower the socially efficient level of output will be. ✓✓
 - There is no one to enforce property rights over the environment. ✓✓
- **Lack of knowledge** ✓✓
 - People cause environmental damage without realising it. ✓✓
 - These effects build up over a period of time causing excessive damage to the environment. ✓✓
- **Carelessness** ✓✓
 - Consumers and businesses are frequently prepared to continue with various harmful practices ✓✓
 - These environmental consequences are often left to future generations to worry about. ✓✓

2. Public sector involvement ✓✓

- **Granting property rights** ✓✓
 - It ensures that people care for the things that belong to them. ✓✓ - (e.g.) Kyoto Protocol ✓✓
 - where developed countries agreed to provide financial assistance to developing countries because they cause less pollution. ✓✓
 - The developed countries, therefore, pay for the right to pollute. ✓✓
- **Charging for the use of the environment.** ✓✓
 - The pricing of the environment is one method used by government to impose environmental charges. ✓✓
 - Government levies a fee on consumers and producers for the waste (solid, liquid, gas) they dump in the environment. ✓✓
 - Best results are obtained when these charges are proportional to the waste they produce. ✓✓
- **Environmental taxes** ✓✓
 - A tax could be imposed on the output or consumption of a good, wherever external environmental costs are generated. ✓✓
 - These are known as green taxes ✓✓ (e.g.) tyres ✓✓
 - The rate of tax should be equal to the marginal external cost. ✓✓
- **Environmental subsidies** ✓✓
 - These subsidies reduce activities that cause environmental damage. ✓✓
 - These costs are recovered from taxation. ✓✓
 - Subsidies could be for the development of new technology or equipment. ✓✓
 - Encourage production of environmental friendly subsidies. ✓✓
 - Encourage recycling of waste such as bottles or cardboards. ✓✓

- **Marketable permits** ✓✓
- Governments may wish to charge for the pollution (externality) and it could raise a levy or a tax to pay for it. ✓✓
- A license (credits) or permit is offered and businesses are allowed to sell their licenses to other businesses. ✓✓
- Licenses or permits or credits are traded in a permit market. ✓✓

3. Public sector control ✓✓

- At times government must take direct control ✓✓
- This occurs through **command and control (CAC)** ✓✓ or **voluntary agreements** ✓✓ or **education** ✓✓

4. International measures ✓✓

- The world's biggest concerns are the loss of biodiversity, toxic and hazardous wastes and climate warming. ✓✓
- South Africa is a signatory to a variety of international agreements that deal with environmental issues and environmental sustainability. ✓✓
- The World Bank, IMF, United Nation strive to achieve the support and cooperation of all countries for their fight against environmental decay. ✓✓
- (E.g.) of International cooperation are the RIO summit of 1992 ✓✓ and Johannesburg Summit 2002 ✓✓ and the Kyoto Protocol on climate change (1997 and 2005) ✓✓

(Max 40)

CONCLUSION

Pressure groups such as the Green party and Friends of the Earth have forced industries to encourage managers to integrate environmental responsibility into all their business decision making. ✓✓

(Max 2)

Accept any other relevant conclusion.

Use the following assessment grid in conjunction with the above to assess the discussion:

MARKS	INTERPRETATION OF TOPIC	
0	Candidate has shown no understanding of the topic	
1	Candidate has shown some understanding of the topic but has missed important aspects of the topic	(1-15)
3	Candidate has interpreted the topic correctly but has not linked facts to the topic	(16-30)
5	Candidate has interpreted the topic correctly and has linked facts to the topic.	(31-45)
		Max 5 [50]

SECTION C: HOMEWORK**TOPIC 1: THE STATE OF THE ENVIRONMENT****QUESTION 1:** 15 minutes *(Taken from The Answer Series)*

1.1 True or False

1.1.1 Greenhouse gasses cause global warming.

1.1.2 Tobacco smoke is a form of air pollution.

(2 x 2) (4)

1.2 What is the difference between conservation and preservation? (4)

1.3 Name and explain two types of pollutions.

(2 x 4) (16)

[24]

TOPIC 2: MEASURES TO ENSURE SUSTAINABILITY**QUESTION 1:** 15 minutes *(Taken from The Answer Series)*

1.1 True or False

1.1.1 The conference held in Johannesburg is known as the Earth Summit.

1.1.2 The USA is not a signatory to the Kyoto Protocol.

1.1.3 Pollution emission rights can be traded internationally.

1.1.4 CITES bans the movement of hazardous waste material.

(4 x 2) (8)

1.2 List THREE private organisations involved in conservation. (6)

1.3 List THREE ways you could contribute to ensure a sustainable environment. (6)

[20]

SECTION D: SOLUTIONS TO HOMEWORK**TOPIC 1: THE STATE OF THE ENVIRONMENT****QUESTION 1:** 15 minutes *(Taken from The Answer Series)*

1.1.1 True ✓✓

1.1.2 True ✓✓

(4)

1.2 Conservation: the sustainable use and management of natural resources. ✓✓

Preservation: Preserving the general environment and keeping it as habitable as possible for people and animals. ✓✓

(4)

1.3 Air pollution✓✓

- The accumulation in the atmosphere of substances that, in sufficient concentrations, endanger human health or produce other measured effects on living matter and other materials. ✓✓
- E.g. noise pollution, tobacco smoke, exhausts fumes, combustion of coal, acid rain. ✓✓
- Negative consequences include: increasing ill health, green house gases, global warming, and ozone depletion. ✓✓

Water pollution✓✓

- The introduction into fresh or ocean waters chemical, physical or biological materials that degrade the quality of the water and affect the organisms living there. ✓✓
- E.g. industrial affluent, agricultural and mining waste, sewage disposal and household waste. ✓✓

(16)
[24]**TOPIC 2: MEASURES TO ENSURE SUSTAINABILITY****QUESTION 1:****15 minutes***(Taken from The Answer Series)*

1.1.1 False✓✓

1.1.2 True✓✓

1.1.3 True✓✓

1.1.4 False✓✓

(8)

1.2 World Wildlife Fund✓✓

Green Trust✓✓

Earthlife Africa✓✓

(6)

1.3 recycling✓✓

using public transport✓✓

conserving electricity✓✓

(6)

[20]

SESSION 15**TOPIC: CONSOLIDATION****LESSON OVERVIEW**

- | | |
|----------------------------|------------|
| 1. Typical exam questions: | 55 minutes |
| 2. Review/solutions/memo: | 35 minutes |

SECTION A: TYPICAL EXAM QUESTIONS**QUESTION 1: 22 minutes**

Chose the correct answer.

Taken from Exemplar 2008

- 1.1 Stagflation is a combination of ...
- A deflation and unemployment.
 - B inflation and unemployment.
 - C inflation and employment.
- 1.2 Development based on meeting the needs of the present generation without compromising the needs of the future, is known as ... development.
- A sustainable
 - B economic
 - C healthy
- 1.3 An example of South African indigenous uniqueness is represented by ...
- A Ushaka Marine World.
 - B Robben Island.
 - C The Addo Elephant Park.

Taken from DOE Nov 2008

- 1.4 When tourists are given the opportunity to experience life in South African townships, it is known as ...
- A international tourism.
 - B ecotourism.
 - C community tourism.
- 1.5 The state can play an important role in maintaining environmental sustainability through its ...
- A fiscal policy.
 - B urbanisation policy.
 - C monetary policy.
- 1.6 According to ... total demand for goods and services exceeds the total supply thereof.
- A cost-push inflation
 - B demand-pull inflation
 - C deflation

Taken from DOE Feb-March 2009

- 1.7 A positive consequence of inflation is that it ...
- A enhances inflation.
 - B benefits creditors.
 - C benefits debtors.
- 1.8 An example of a negative effect of tourism is ...
- A increased unemployment.
 - B increased foreign income.
 - C uncontrolled pollution.
- 1.9 Local capacity building among ... people is a crucial aspect of sustaining the environment.
- A endogenous
 - B indigenous
 - C exogenous

Taken from DOE Feb-March 2010

- 1.10 If the rand depreciates, prices and the rate of inflation will ...
- A decrease.
 - B increase.
 - C remain the same.
- 1.11 Goods that have an external benefit will be ... in the market.
- A undersupplied
 - B freely supplied
 - C oversupplied
- 1.12 Tourism could lead to socio-economic problems such as ...
- A pollution.
 - B unemployment.
 - C poverty.

Taken from DOE Nov 2010

- 1.13 Owing to inflation the buying power in 2009, compared to 1995, ...
- A increased.
 - B decreased.
 - C remained the same.

1.14 The ... sector creates the most jobs globally.

- A tourism
- B farming
- C telecommunication

1.15 Greenhouse gases form part of ... pollution.

- A water
- B land
- C air

Taken from DOE Feb/Mar 2011

1.16 A firm will spend less on pollution-reduction equipment because of its low marginal ...

- A private benefit.
- B private cost.
- C social cost.

1.17 Deflation is defined as a decline in the ...

- A price of certain products.
- B general price level.
- C gross domestic product.

1.18 South Africa benefits directly from tourism because of the increase in tourist ...

- A import.
- B expenditure.
- C savings.

Taken from DOE Nov 2011

1.19 Hyperinflation has been recorded in developing countries that have experienced ...

- A an increase in the buying power of money.
- B social and political conflict or civil war.
- C a decrease in the rate of inflation.

1.20 The tourism multiplier implies that the ...

- A benefit from a tourist is greater than the money spent.
- B multiplier is always smaller than one.
- C benefit from a tourist is smaller than the money spent.

1.21 Tourism is ... intensive.

- A capital
- B labour
- C risk

Taken from DOE Feb/Mar 2012

1.22 A national demand for higher wages will lead to ...

- A demand-pull inflation.
- B cost-push inflation.
- C deflation.

- 1.23 Tourists are fascinated by local community practices, food preparation and rituals. This complex set of knowledge and skills is known as ...
- A indigenous knowledge systems.
 - B infrastructure development.
 - C the tourism product.

(2 x 23) [46]

QUESTION 2: 30 minutes

Choose the correct word from those given in brackets.

Taken from Exemplar 2008

- 2.1 The SARB uses the (CPIX/CPI) in the pursuit of its inflation target.
- 2.2 The tourism policy at national level is directed by the (DEAT/ Tourism Forum).
- 2.3 Pollution is an example of a (positive/negative) externality.
- 2.4 The Rio Summit is also known as the (Earth/Environmental) Summit.

Taken from DOE Nov 2008

- 2.5 Foreigners visiting South Africa are known as (inbound/outbound) tourists.
- 2.6 When the rand depreciates against the major currencies of the world, it is immediately reflected in the (GDP/CPI).
- 2.7 SA Tourism is a (private/public) enterprise with private stakeholder representation on its council.
- 2.8 During (deflation/stagflation) low economic growth, high unemployment and high rates of inflation prevail.

Taken from DOE Feb-March 2009

- 2.9 The CPI is published (monthly/quarterly) and lists details for a year.
- 2.10 The most common reason for a tourist tax is to recover (domestic/ external) costs.
- 2.11 One of the most volatile price items in the inflation index is (house/ food) prices.
- 2.12 An institution that strives to achieve support and cooperation of all countries in the fight against environmental decay is the (World Trade Organisation/International Trade Commission)

Taken from DOE Feb-March 2010

- 2.13 (Indigenous/Endogenous) knowledge systems refer to the culture, history and environment that is unique to the local people.
- 2.14 Pollution occurs when the flow of residual emissions from human activity is (less/greater) than the natural environments' capacity to absorb them.
- 2.15 (Robben/Seal) Island is a World Heritage Site.
- 2.16 Prices of resources (increase/decrease) as they become scarce.

Taken from DOE Nov 2010

- 2.17 When aggregate spending in the economy increases faster than output, (demand-pull/cost-push) inflation occurs.
- 2.18 A decrease in the general price level is called (deflation/ stagflation).
- 2.19 Globalisation provides an injection to (national/international) tourism.
- 2.20 Environmental taxation is an example of (government/market) related measures to ensure sustainability.

Taken from DOE Feb/Mar 2011

- 2.21 (Ecotourism/Externality) means the cost or benefit arising from any activity, which does not benefit the person or the organisation carrying on the activity.
- 2.22 When trees are removed on a large scale, (conservation/deforestation) takes place.
- 2.23 In an economy with full employment (the demand for exports/a higher rate of income tax) will cause inflation.
- 2.24 Most employment in the tourism industry is in the (transport/hospitality) sectors.

Taken from DOE Nov 2011

- 2.25 The inflation target is determined by (government/market forces).
- 2.26 The country that tourists visit is referred to as the (destination/tourist-generating) country.
- 2.27 The destruction of coral reefs is causing (direct environmental stress/waste product generation).
- 2.28 Re-using goods that have served their original purpose is referred to as (recycling / degradation).

Taken from DOE Feb/Mar 2012

- 2.29 A combination of increasing unemployment and high inflation is known as (deflation/stagflation).
- 2.30 Inflation generally benefits (pensioners/debtors).
- 2.31 Domestic tourism refers to people travelling (outside/within) the borders of a country.
- 2.32 Meeting the needs of the present generation without compromising the needs of future generations is called (sustainable/rural) development.

(2 x 32) [64]

SECTION B: SOLUTIONS AND HINTS TO SECTION A

QUESTION 1

Taken from Exemplar 2008

- 1.1 B (inflation and unemployment) ✓✓
- 1.2 A (sustainable) ✓✓
- 1.3 B (Robben Island) ✓✓

Taken from DOE Nov 2008

- 1.4 A (International tourism) / C (community tourism) ✓✓
 1.5 A (fiscal policy) ✓✓
 1.6 B (demand-pull inflation) ✓✓

Taken from DOE Feb-March 2009

- 1.7 C benefits debtors ✓✓
 1.8 C uncontrolled pollution ✓✓
 1.9 B indigenous ✓✓

Taken from DOE Feb-March 2010

- 1.10 B (increase) ✓✓
 1.11 A (undersupplied) ✓✓
 1.12 A (pollution) ✓✓

Taken from DOE Nov 2010

- 1.13 B – decreased ✓✓
 1.14 A – tourism ✓✓
 1.15 C – air ✓✓

Taken from DOE Feb/Mar 2011

- 1.16 A – private benefit ✓✓
 1.17 B – general price level ✓✓
 1.18 B – expenditure ✓✓

Taken from DOE Nov 2011

- 1.19 B - (social and political conflict or civil war) ✓✓
 1.20 A - (the benefit from a tourist is greater than the money spent) ✓✓
 1.21 B - (labour) ✓✓

Taken from DOE Feb/Mar 2012

- 1.22 B – cost-push inflation ✓✓
 1.23 A – indigenous knowledge systems ✓✓

(2 x 23) [46]

QUESTION 2

Choose the correct word from those given in brackets.

Taken from Exemplar 2008

- 2.1 CPIX ✓✓
 2.2 DEAT ✓✓
 2.3 Negative ✓✓
 2.4 Earth ✓✓

Taken from DOE Nov 2008

- 2.5 Inbound ✓✓
 2.6 CPI ✓✓
 2.7 Public ✓✓
 2.8 Stagflation ✓✓

Taken from DOE Feb-March 2009

- 2.9 Monthly ✓✓
 2.10 External ✓✓
 2.11 Food ✓✓

Taken from DOE Feb-March 2010

- 2.13 Indigenous ✓✓
 2.14 Greater ✓✓
 2.15 Robben ✓✓

2.12 World Trade Organisation ✓✓

2.16 Increase ✓✓

Taken from DOE Nov 2010

Taken from DOE Feb/Mar 2011

2.17 Demand-pull ✓✓

2.21 externality ✓✓

2.18 Deflation ✓✓

2.22 deforestation ✓✓

2.19 International ✓✓

2.23 the demand for exports ✓✓

2.20 Government ✓✓

2.24 hospitality ✓✓

Taken from DOE Nov 2011

Taken from DOE Feb/Mar 2012

2.25 Government ✓✓

2.29 stagflation ✓✓

2.26 Destination ✓✓

2.30 debtors ✓✓

2.27 Direct environmental stress ✓✓

2.31 within ✓✓

2.28 Recycling ✓✓

2.32 sustainable ✓✓

(2 x 32) [64]

SECTION C: HOMEWORK

QUESTION 1: 22 minutes

(Taken from The Answer Series)

1.1 Choose the correct answer in brackets:

- 1.1.1 (Hyperinflation / Stagflation) is referred to as runaway inflation.
 1.1.2 (CPI / CPIX) is used by the SARB for inflation targeting.
 1.1.3 (CPI / CPIX) excludes interest rate bearing mortgage bonds.
 1.1.4 (Debtors / Creditors) are regarded as 'winners' when inflation is high.
 1.1.5 People with (fixed / flexible) investments gain when inflation is high.
 1.1.6 Monetary measures are applied by the (Minister of Finance / Governor of the SARB).
 1.1.7 MPC increases and decreases the (prime lending rate / repurchasing rate).
 1.1.8 South Africa's inflation target range ceiling is (6% / 9%).
 1.1.9 Wage increases cause (cost-push / demand-pull) inflation.
 1.1.10 Inflation is a (phenomenon / process). (10 x 2) (20)

1.2 True or False

- 1.2.1 A tourist is only someone from another country.
 1.2.2 Tourism has positive and negative externalities.
 1.2.3 The WTTTC condones the levying of taxes on the tourist industry.
 1.2.4 Tourism can be used to promote rural settlement.
 1.2.5 People cannot be tourists in their own country.
 1.2.6 The World Summit on Sustainable Development only focused on the environment.
 1.2.7 Taxes imposed on output which has a negative impact on the environment are known as green taxes.
 1.2.8 The biggest meeting ever held to discuss sustainable development was held in Rio de Janeiro. (8 x 2) (16)

[36]

SECTION D: SOLUTIONS TO HOMEWORK**QUESTION 1: 22 minutes***(Taken from The Answer Series)*

1.1 Choose the correct answer in brackets:

1.1.1 Hyperinflation ✓✓

1.1.2 CPIX ✓✓

1.1.3 CPIX ✓✓

1.1.4 Debtors ✓✓

1.1.5 Flexible ✓✓

1.1.6 Governor of the SARB ✓✓

1.1.7 Repurchasing rate ✓✓

1.1.8 9% ✓✓

1.1.9 Cost-push ✓✓

1.1.10 Process ✓✓

(10 x 2) (20)

1.2 True or False

1.2.1 False ✓✓

1.2.2 True ✓✓

1.2.3 True ✓✓

1.2.4 True ✓✓

1.2.5 False ✓✓

1.2.6 False ✓✓

1.2.7 True ✓✓

1.2.8 False ✓✓

(8 x 2) (16)

[36]

SESSION 16**TOPIC: CONSOLIDATION****LESSON OVERVIEW**

1. Typical exam questions: 55 minutes
2. Review/solutions/memo: 35 minutes

SECTION A: TYPICAL EXAM QUESTIONS**QUESTION 1: 58 minutes**

Choose a description from COLUMN B that matches an item in COLUMN A.

Taken from Exemplar 2008

COLUMN A	COLUMN B
1.1 South African Reserve Bank	A. a key institution in the capital market
1.2 Externalities	B. occurs when there are only two oligopolies in the market
1.3 Agricultural produce	C. a good example of durable goods
1.4 JSE Securities Exchange	D. these products are often graded to make them homogeneous
1.5 Duopoly	E. a key institution in the money market
1.6 Economic indicator	F. also known as spillover effects
1.7 Globalisation	G. an agreement which addresses issues regarding the ozone layer
1.8 Montreal Protocol	H. shows the behaviour of one or other economic variable
	I. the worldwide interfacing and interaction of economies with trade as an important element

(2 x 8) (16)

Taken from DOE Nov 2008

COLUMN A	COLUMN B
1.9 Economic development	A. the quantity demanded equals the quantity supplied
1.10 Normal profit for business	B. an increase in the capacity of the economy to produce more
1.11 CPIX	C. inflation rate excluding items from the CPI that have highly volatile prices
1.12 Short-term equilibrium	D. attracting infrastructure and businesses to underdeveloped areas
1.13 Core inflation	E. an increase in the standard of living of the population
1.14 Critical infrastructure programme	F. cash grants for projects that require new, expanded or improved infrastructure
1.15 Spatial development initiatives	G. marginal revenue = short-term marginal cost
1.16 Economic growth	H. inflation rate excluding mortgage bond interest rates
	I. average cost = average revenue

(2 x 8) (16)

Taken from DOE Feb-March 2009

COLUMN A	COLUMN B
1.17 GDI 1.18 Laffer curve 1.19 Normal profit 1.20 Cartel 1.21 Equity fairness 1.22 Employment Equity Act 1.23 Green belt 1.24 World Heritage Site	A. progressive personal income tax B. land reserved for social use C. total income received by the permanent residents of the country D. total income received by the factors of production for producing goods and services within the country E. interest rate changes F. shows the relationship between tax rates and tax revenue of the government G. promotes tourism H. empowerment and transformation legally enforced in South Africa I. when average revenue equals average cost J. collusion between oligopolies

(2 x 8) (16)

Taken from DOE Nov 2009

COLUMN A	COLUMN B
1.25 Parastatal 1.26 Direct investment 1.27 Collusion 1.28 Pareto efficiency 1.29 Urbanisation 1.30 Interest rates 1.31 Preservation 1.32 Surcharge	A. Organisation of Petroleum Exporting Countries – OPEC B. protecting the earth's resources to support future generations C. a tariff imposed on imported goods to control inflation D. optimal allocation of resources E. large public corporations run according to business principles F. the main operational instrument used by the SARB G. a process where communities move from rural to urban areas H. the purchasing of fixed property to create employment I. an arrangement between businesses to increase competition

(2 x 8) (16)

Taken from DOE Feb-March 2010

COLUMN A	COLUMN B
1.33 New economic paradigm 1.34 GDE 1.35 Positive externalities 1.36 Economies of scale 1.37 Free trade 1.38 Quota 1.39 WTTC 1.40 Foreign exchange	A. the main spin-off benefit derived from tourism B. benefits enjoyed by someone other than the firms producing the goods C. stabilising markets using monetary and fiscal policy D. research on tourism is done through this office E. large-scale production results in lower unit costs F. total value of spending by the permanent residents of a country G. total value of spending inside the borders of a country H. absence of restrictions on imports and exports I. a drastic measure to restrict imports

(2 x 8) (16)

Taken from DOE Nov 2010

COLUMN A	COLUMN B
1.41 Social services 1.42 Comparative advantage 1.43 Shut-down point 1.44 Marginal cost 1.45 Dualistic 1.46 South African Reserve Bank (SARB) 1.47 Environmental pollution 1.48 Consumer price index (CPI)	A. produces given goods at a lower input cost than other countries B. at a price less than average cost (AC) C. an indicator of inflation D. the objectives of government to improve the livelihoods of the poor E. cost incurred when production increases by an additional unit F. dumping of waste material G. at a price less than average variable cost (AVC) H. the monetary authority in South Africa I. a country where a developed component co-exists with a developing component

(2 x 8) (16)

Taken from DOE Feb/Mar 2011

COLUMN A		COLUMN B	
1.49	Political shocks	A	charged for the adverse effects on the environment on output or consumption
1.50	Real flow	B	the degree of inequality in the distribution of income
1.51	Market failure	C	exogenous factor influencing business cycles
1.52	Phillips curve	D	calculated as a certain amount per unit, mass or size of an article
1.53	Lorenz curve	E	supply of goods and services
1.54	Specific import	F	the best available production has not been achieved
1.55	duties	G	it illustrates the relationship between unemployment and inflation
1.56	Green taxes	H	consumption by one person does not in any way reduce the consumption by someone else
		I	the relationship between taxable income and tax rates

(2 x 8) (16)

Taken from DOE Nov 2011

COLUMN A		COLUMN B	
1.57	Multiplier	A	expenditure of a business on the purchase of inputs required for production
1.58	SACU	B	the ratio between the eventual change in income and the initial investment
1.59	Explicit cost	C	the portion of an increase in income that is not consumed
1.60	Market structure	D	organisational features of perfect and imperfect markets
1.61	Marginal	E	negotiate about foreign free-trade areas with the rest of the world
1.62	propensity to save	F	a set of legally binding international agreements aimed at reducing greenhouse gases
1.63	Gini coefficient	G	the distribution of income among the population
1.64	Kyoto Protocol	H	to prevent the extinction of elements of the environment
		I	the proportion of the population that lives on less than \$1 per day

(2 x 8) (16)

Taken from DOE Feb/Mar 2012

COLUMN A		COLUMN B	
1.65	Fiscal policy	A	\$1= R7,40
1.66	SETA	B	government spending and taxation
1.67	Exchange rate	C	workplace skills and leadership
1.68	Non-price competition	D	minimum earnings required to prevent the entrepreneur from leaving the industry
1.69	Normal profit	E	the price level rises so rapidly that people lose confidence in the value of the currency of a country
1.70	Ad valorem	F	advertising campaigns
1.71	Hyperinflation	G	a tariff as a percentage of the value of imported goods
1.72	Ecotourism	H	equal to economic profit
		I	the enjoyment and appreciation of undisturbed nature

(2 x 8) (16)

[144]

SECTION C: SOLUTIONS AND HINTS TO SECTION A

QUESTION 1:

58 minutes

Taken from Exemplar 2008

- 1.1 E ✓✓
- 1.2 F ✓✓
- 1.3 D ✓✓
- 1.4 A ✓✓
- 1.5 B ✓✓
- 1.6 H ✓✓
- 1.7 I ✓✓
- 1.8 G ✓✓

Taken from DOE Nov 2008

- 1.9 E ✓✓
- 1.10 G / I ✓✓
- 1.11 H ✓✓
- 1.12 A / G ✓✓
- 1.13 C ✓✓
- 1.14 F ✓✓
- 1.15 D ✓✓
- 1.16 B ✓✓

Taken from DOE Feb-March 2009

- 1.17 D ✓✓
- 1.18 F ✓✓
- 1.19 I ✓✓
- 1.20 J ✓✓
- 1.21 A ✓✓
- 1.22 H ✓✓
- 1.23 B ✓✓
- 1.24 G ✓✓

Taken from DOE Nov 2009

- 1.25 E ✓✓
- 1.26 H ✓✓
- 1.27 A ✓✓
- 1.28 D ✓✓
- 1.29 G ✓✓
- 1.30 F ✓✓
- 1.31 B ✓✓
- 1.32 C ✓✓

Taken from DOE Feb-March 2010

- 1.33 C ✓✓
- 1.34 G ✓✓
- 1.35 B ✓✓
- 1.36 E ✓✓
- 1.37 H ✓✓
- 1.38 I ✓✓
- 1.39 D ✓✓
- 1.40 A ✓✓

Taken from DOE Nov 2010

- 1.41 D ✓✓
- 1.42 A ✓✓
- 1.43 G ✓✓
- 1.44 E ✓✓
- 1.45 I ✓✓
- 1.46 H ✓✓
- 1.47 F ✓✓
- 1.48 C ✓✓

Taken from DOE Feb/Mar 2011

- 1.49 C ✓✓
- 1.50 E ✓✓
- 1.51 F ✓✓
- 1.52 G ✓✓
- 1.53 B ✓✓
- 1.54 D ✓✓
- 1.55 A ✓✓
- 1.56 H ✓✓

Taken from DOE Nov 2011

- 1.57 B ✓✓
- 1.58 E ✓✓
- 1.59 A ✓✓
- 1.60 D ✓✓
- 1.61 C ✓✓
- 1.62 G ✓✓
- 1.63 F ✓✓
- 1.64 H ✓✓

Taken from DOE Feb/Mar 2012

- 1.65 B ✓✓
- 1.66 C ✓✓
- 1.67 A ✓✓
- 1.68 F ✓✓
- 1.69 D ✓✓
- 1.70 G ✓✓
- 1.71 E ✓✓
- 1.72 I ✓✓

(72 x 2) [144]

SECTION C: HOMEWORK**QUESTION 1: 18 minutes**

Give ONE term for each of the following descriptions by choosing a term from the list below.

Taken from DOE Nov 2008

social security grants; central bank; foreign exchange market; money market; capital market; deregulation; commercial bank; regulation

- 1.1 A market for short-term savings and loans.
- 1.2 The removal of laws and other forms of government control.
- 1.3 The most important source of income for the poor.
- 1.4 The institution monetarists use to combat inflation.
- 1.5 The market for international currencies.

Taken from DOE Nov 2009

SARB; Medium-Term Expenditure Framework; globalisation; global warming; motor oil; Stats SA; budget; petrol; Skills Support Programme; Critical Infrastructure Programme

- 1.6 Shows income and expenditure estimates for a three-year period.
- 1.7 A regulated product used by motorists.
- 1.8 A cash grant for skills development.
- 1.9 An institute that publishes separate inflation data for certain metropolitan areas.
- 1.10 The predicted increased warming of the atmosphere as a result of the increased accumulation of carbon dioxide.

Taken from DOE Nov 2010

depression; unregulated market; gross domestic product (GDP); black economic empowerment (BEE); poor infrastructure; a good infrastructure; regulated market; Asgisa; gross domestic expenditure (GDE)

- 1.11 The total value of all final goods and services that are produced within the borders of a country.
- 1.12 High unemployment, low wages and decreased purchasing power of households.
- 1.13 A market where there is no government interference.
- 1.14 A redress policy used by the South African government.
- 1.15 A reason for the development of the tourism industry.

Taken from DOE Nov 2011

disequilibrium; demerit goods; conservation; dumping;
economic indicator; equilibrium

- 1.16 Selling goods in a foreign country at prices that are below the cost of production in the country of origin
- 1.17 Cigarettes, alcohol and tobacco
- 1.18 Surplus or deficit on the balance of payments
- 1.19 Real Gross Domestic Product
- 1.20 Sustainability of our natural resources (20 x 2) [40]

SECTION D: SOLUTIONS TO HOMEWORK

QUESTION 1:

18 minutes

Taken from DOE Nov 2008

- 1.1 money market / money ✓
- 1.2 deregulation ✓✓
- 1.3 social security grants ✓✓
- 1.4 central bank ✓✓
- 1.5 foreign exchange market / foreign exchange ✓✓

Taken from DOE Nov 2009

- 1.6 Medium-Term Expenditure Framework ✓✓
- 1.7 Petrol ✓✓
- 1.8 Skills Support Programme ✓
- 1.9 Stats SA ✓✓
- 1.10 Global warming ✓✓

Taken from DOE Nov 2010

- 1.11 Gross Domestic Product (GDP) ✓✓
- 1.12 Depression ✓✓
- 1.13 Unregulated market ✓✓
- 1.14 Black Economic Empowerment (BEE) ✓✓
- 1.15 A good infrastructure ✓✓

Taken from DOE Nov 2011

- 1.16 dumping ✓✓
- 1.17 demerit goods ✓✓
- 1.18 disequilibrium ✓✓
- 1.19 economic indicator ✓✓
- 1.20 conservation ✓✓

(20 x 2) [40]