

NATIONAL SENIOR CERTIFICATE

GRADE 12

SEPTEMBER 2020

ECONOMICS P2 MARKING GUIDELINE

MARKS: 150

This marking guideline consists of 16 pages.

SECTION A (COMPULSORY)

QUESTION 1

1.1 MULTIPLE-CHOICE QUESTIONS

- 1.1.1 C ✓✓ average variable
- 1.1.2 B ✓✓ production
- 1.1.3 B √√ information made available
- 1.1.4 A ✓✓ non-excludable
- 1.1.5 D ✓✓ inflation targeting
- 1.1.6 C ✓✓ decrease
- 1.1.7 A ✓✓ car tyres
- 1.1.8 D ✓✓ Basel Convention

(8 x 2) (16)

1.2 MATCHING ITEMS

- 1.2.1 C ✓ All costs are variable
- 1.2.2 H ✓ Buyers are charged different prices for the same product
- 1.2.3 F ✓ The firm is the industry
- 1.2.4 B ✓ Financial grant to support the production of a good or service
- 1.2.5 G ✓ Excludes mortgage interest costs
- 1.2.6 D ✓ Prices of imported goods are shown explicitly
- 1.2.7 A ✓ People lose confidence in the value of money
- 1.2.8 E ✓ Sustained development that does not erode the environment

(8 x 1) (8)

1.3 GIVE THE TERM

- 1.3.1 Normal profits ✓
- 1.3.2 Cartel ✓
- 1.3.3 Merit goods ✓
- 1.3.4 GDP deflator ✓
- 1.3.5 Conservation ✓
- 1.3.6 Hazardous waste ✓ (6 x 1) (6)

TOTAL SECTION A: 30

SECTION B

Answer any TWO of the three questions from this section in the ANSWER BOOK.

QUESTION 2

2.1 Answer the following questions.

2.1.1 List any TWO examples of community goods.

- Defence services √
- Police services ✓
- Light house √
- Street lighting ✓
- Flood control ✓
- Storm water drainage ✓
 (Accept any other correct relevant response)
 (2 x 1) (2)

2.1.2 How would perfect markets disadvantage consumers?

- By limiting the variety of consumer goods ✓✓
- By exposing consumers to lower the quality of goods √√
 (Accept any other correct relevant response)
 (2)

2.2 DATA RESPONSE

2.2.1 Name ONE example of barriers to entry in an oligopoly.

- High start-up capital ✓
- Economies of scale ✓
- Ownership of raw materials ✓
- Patents √
- Licences ✓
 (Accept any other correct relevant response)

2.2.2 Give any non-price competition strategy used by oligopolists.

- Advertising ✓
- After sales service ✓
- Efficient service √
- Door to door services ✓
- Loyalty rewards √
 (Accept any other correct relevant response)
 (1 x 1)
 (1)

(1)

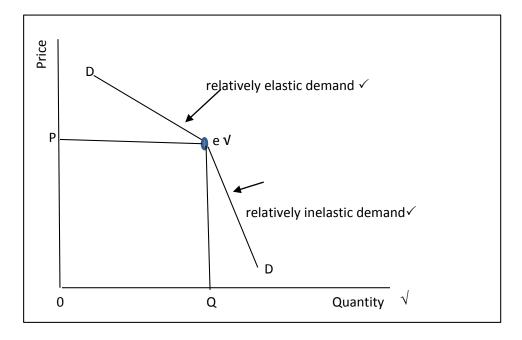
2.2.3 Briefly describe the term oligopoly.

Oligopoly is a market structure where only a few sellers operate and sell differentiated products $\checkmark\checkmark$ (Accept any other correct relevant description) (2)

2.2.4 Briefly explain tacit collusion by oligopolies.

- Oligopolies collude without communicating formally or concluding formal agreements ✓√
- A dominant firm (price leader) will increase the price of a product in the hope that its rivals will see this as a signal and do the same √√ (Accept any other correct relevant response)

2.2.5 With the aid of a graph explain the demand curve of an oligopolist.



Mark allocation

Correct labelling of both axes 1 mark
Correct position and labelling of both segments 2 marks
Indication of equilibrium point 1 mark
Maximum 4 marks

(4)

(2)

2.3 DATA RESPONSE

2.3.1 At which point on the graph above are the demands of consumers met?

Point C \checkmark (1)

2.3.2 What is represented by point E or F?

Allocative and productive inefficiency √ (1)

2.3.3 Briefly describe the term indifference curve (I).

Indifference curve shows the combination of two goods which gives the consumer the same level of satisfaction $\checkmark\checkmark$ (Accept any other correct relevant response)

2.3.4 Briefly explain the reason for the shape of the Production Possibility Curve above.

The Production Possibility Curve is concave to the origin because increases in the production of one good will lead to an increasing sacrifice in terms of a reduction in other goods $\checkmark\checkmark$ (Accept any other correct relevant explanation) (2)

2.3.5 How can negative externality be reduced using quantity control?

- Regulating the production of a good ✓✓
- Issuing licences to allow production ✓✓
- Setting quota limits to the total amount of a good to be produced √√
 (Accept any other correct relevant response)
 (2 x 2)

2.4 Distinguish between *natural monopoly* and *artificial monopoly*.

Natural monopoly

- Exists when it is not possible for more than one producer to exist and survive in the industry ✓✓
- There are high development costs which prevent others from entering the market √√
- The massive fixed costs of production result in an enormous level of output being needed to achieve economies of scale √√
- A single business in the industry can serve the market at a lower price than two or more businesses together √√
- Natural monopolies are owned or regulated by the government, e.g. provision of electricity √√ (2 x 2)

Artificial monopoly

- Exists when more than one producer exists and survives in the market ✓✓
- The barriers to entry are not economic in nature, e.g. licencing and patents ✓√
- Licences are required for TV and radio broadcasting, telephone and cellular networks ✓√
- Licences protect operators against the entry of competitors √√
- A patent is the legal and exclusive right of a patent holder to manufacture a product using his or her own unique invention √√
- Patents are frequently encountered in the pharmaceutical industry √√
 (Accept any other correct relevant response)
 (2 x 2) (8)

2.5 Evaluate the effectiveness of Cost Benefit Analysis as a decision-making tool.

CBA may be effective as a decision-making tool by ...

- evaluating whether capital invested is worth it √√
- influencing decisions whether to hire new employees ✓√
- developing a benchmark for comparing of projects ✓√
- helping predict whether the benefits of a policy outweigh its costs relative to other alternatives √√

CBA may not be effective as a decision-making tool because there could be ...

- potential inaccuracy in identifying and quantifying costs and benefits due to accidentally omitting certain costs and benefits as a result of inability to forecast indirect causal relationship
- ambiguity and uncertainty involved in quantifying and assigning a monetary value to an inaccurate CBA ✓√
- increased subjectivity for intangible costs and benefits since some costs are nonmonetary in nature, e.g. increases in customer and employee satisfaction √√
- inaccurate calculation of present value which may result in misleading analysis √√
 (Accept any other correct relevant response)
 (4 x 2)
 (8)

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[**40**]

QUESTION 3: CONTEMPORARY ECONOMIC ISSUES

3.1	Answer	the	follo	owina	questions.

- 3.1.1 Name any TWO examples of natural disasters that can be a cause of cost-push inflation.
 - Floods ✓
 - Drought ✓
 - Earthquakes / Hurricanes √
 (Accept any other correct relevant response)
 (2 x 1)
- 3.1.2 Why are metropolitan areas in South Africa the most polluted?
 - High traffic congestion which results in high carbon emissions ✓✓
 - There are a number of factories which contribute to the release of poisonous gases into the atmosphere ✓✓
 - These areas are more industrialised and as such production in the factories can result in emission of greenhouse gases √√ (Accept any other correct relevant response)

3.2 DATA RESPONSE

3.2.1 Which province experienced the highest rate of inflation in the graph above?

Western Cape ✓ (1)

(2)

(1)

3.2.2 Which type of inflation excludes items with high volatile prices?

Core inflation ✓

3.2.3 Briefly describe the term *inflation*.

Inflation is a sustained and significant increase in the general price level over a specific period of time and simultaneous decline in the buying power of money $\checkmark\checkmark$

(Accept any other correct relevant response) (2)

3.2.4 Briefly explain the importance of measuring inflation.

It is important to measure inflation because:

- Inflation statistics form the basis of government policy ✓✓
- Affects the planning of firms and individuals ✓✓
- Inflation statistics are used to set index linked wages, welfare benefits and interest rates $\checkmark\checkmark$

(Accept any other correct relevant response) (1 x 2)

3.2.5 Examine the effects of inflation on supply and demand for bonds.

- Higher inflation decreases the demand for bonds and increase their supply as borrowers become more willing to borrow money – resulting in lower bond prices and higher interest rates √√
- Lower inflation increases the demand for bonds and decrease their supply because borrowers become less interested in issuing bonds ✓✓
 (Accept any other correct relevant response)
 (2 x 2)

3.3 DATA RESPONSE

3.3.1 Identify the type of pollution in the picture above.

Air pollution \checkmark (1)

3.3.2 Which international agreement has been implemented to deal with climate change?

- Kyoto Protocol ✓
- United Nations' Framework Convention on Climate Change √ (1)
- 3.3.3 Briefly describe the term *climate change*.

Climate change is the rise in the average surface temperatures, mostly due to the burning of fossil fuels $\checkmark\checkmark$ (Accept any other relevant correct response) (2)

3.3.4 Briefly explain any measure that can be implemented to reverse climate change.

- Widespread international cooperation of countries to commit themselves to fight against global warming √√
- Sharing weather information and weather patterns with other countries ✓ ✓
- Limiting pollution ✓✓
- Banning chemical products such as greenhouse gases that damage the ozone layer √√
 (Accept any other correct relevant response)
 (1 x 2)
 (2)

3.3.5 Examine the negative impact of climate change on agriculture and food supply.

- Changes in the frequency and severity of drought and floods could pose challenges to farmers and ranchers and threaten food supply ✓√
- Climate change can disrupt food availability, reduce access and affect food quality ✓✓
- Changes in extreme weather and reduction in water availability may all result in reduced agricultural productivity √√
- Climate change reduces nutrients in agricultural products √√
- Production by farmers is reduced as they struggle to keep up with the bad weather √√
 (Accept any other correct relevant response)
 (2 x 2) (4)

3.4 Briefly explain *increased consumption by households* and *investment spending* as causes of demand-pull inflation.

Increase in consumption by households

- Disposable income of households can increase at a faster rate than aggregate supply √√
- Fewer savings: ✓ if consumers change their saving habits and start spending their current and accumulated savings, growth in aggregate demand can outstrip growth in aggregate supply ✓ ✓
- Reduction in taxes: ✓ this applies more to personal income tax than indirect taxes ✓ ✓
- Access to credit: ✓ there is a greater availability of consumer credit or the availability of cheaper credit as a result of decrease in lending taxes ✓ ✓
 (Accept any other correct relevant response)

Investment spending

- Reduced interest rates will encourage firms to expand operations ✓✓
- Businesses will invest more on capital goods and this may lead to increased demand for goods and services which are part of investment √√
- An increase in aggregate demand which may be greater than aggregate supply will lead to an increase in the overall prices of goods and services √√ (Accept any other correct relevant response)
 (2 x 2) (8)

3.5 Why is biodiversity under threat?

Biodiversity is under serious threat because of:

- degradation and destruction of the natural habitat which may be caused by restructuring of land for development purposes √√
- intensifying agricultural practices which may cause pollution to the natural habitat √√
- reduction of land capacity for hosting wildlife ✓✓
- pollution of soil and water caused by industries during production of goods and services, ✓✓ for example, burning of fossil fuels, ✓ dumping into the oceans, ✓ etc.
- carbon emissions, deforestation and other land use changes, due to human activities, may result into changes in weather patterns and result in habitat loss
- overhunting and overfishing which contribute to loss of biodiversity by killing numerous species √√
 (Accept any other correct relevant response)
 (4 x 2) (8) [40]

QUESTION 4: MICROECONOMICS AND CONTEMPORARY ECONOMIC ISSUES

4.1 Answer the following questions	4.1	Answer	the 1	following	questions
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- 4.1.1 Name TWO types of costs used by economists as opposed to accountants.
 - Implicit costs √
 - Explicit costs √

(2)

- 4.1.2 What could be the contributing factor for high rates of inflation in South Africa?
 - Continuous increase in price of crude oil ✓✓

(2)

- 4.2 DATA RESPONSE
 - 4.2.1 Give a formula for calculating total revenue.

(1)

4.2.2 At which level of output is the firm maximising revenue?

Unit 6 ✓

(1)

4.2.3 Briefly describe the term marginal revenue.

Extra revenue received for every additional unit sold $\checkmark\checkmark$ (Accept any other correct relevant response)

(2)

- 4.2.4 Explain how monopolists determine the production level.
 - The monopolist first determines the price and then the quantity it wants to sell ✓√
 - By reducing the price, monopolists will sell more units of the product and vice versa ✓✓
 (Accept any other correct relevant explanation)

(2)

4.2.5 Use the information above and calculate average revenue for unit 3. Show all your calculations.

 $AR = TR/units \checkmark$ $= 24/3 \checkmark$ $= R8 \checkmark \checkmark$

(4)

4.3 DATA RESPONSE

4.3.1	Identify from the extract the cause of a sharp fall in inflation during
	the second quarter of 2020.

Lower fuel prices ✓ (1)

- 4.3.2 Name ONE group of people mostly affected by high levels of inflation.
 - Retired people ✓
 - Pensioners √
 - Poor people ✓
 (Accept any other relevant correct response)
 (1)

4.3.3 Briefly describe the term *stagflation*.

Stagflation is a condition of stagnating economic growth, high unemployment coupled with high rates of inflation $\checkmark\checkmark$ (Accept any other relevant correct response)

(2)

(2)

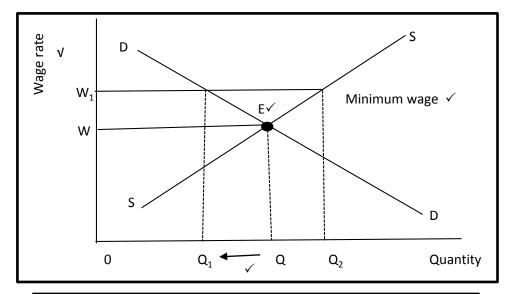
- 4.3.4 Explain wages as the cause of cost-push inflation.
 - Wages form the main source of inflation as they constitute 50 % of the cost of determining GDP in South Africa √√
 - Wage increases that are greater than productivity increases result in increased costs of production √√
 - Producers recover these costs through increasing the prices of their goods √√

4.3.5 How can taxation be used to combat inflation?

- Increasing direct taxation such as income tax will reduce the disposable income of consumers and fewer goods will be demanded in the economy
- Increasing indirect taxes such as VAT and levy on fuel will make goods more expensive and this may curb the demand and spending
- The government may implement the surcharge on imported goods making them to be more expensive and demand for such goods will be reduced √√

(Accept any other correct relevant response) (2 x 2) (4)

4.4 With the use of a graph, explain the effects of minimum wage.



MARK ALLOCATION

Correct labelling of axis = 1 mark
Labelling demand and supply = 1 mark
Indication of equilibrium point = 1 mark
Indication of decrease in quantity
demanded of labour = 1 mark

Maximum: 4 marks

- Minimum wage is set by the government above the ongoing wage ✓✓
- Distribution of income will improve from W to W1 ✓✓
- Consumers will have more to spend thus improving their standard of living ✓√
- Demand for labour will decrease from Q to Q1 while supply increases from Q to Q₂ because employers will not be willing to pay the minimum wage ✓✓
- Some employers will retrench workers √√
 (Accept any other correct relevant response)
 (2 x 2)

4.5 Examine the role of price expectation on inflation in South Africa.

- South African firms and consumers usually act on their expectations thereby causing high inflation √√
- If workers expect future inflation, they bargain for higher wages to compensate for the increased cost of living. ✓✓
- The success of the high wage bargain contributes towards inflation ✓✓
- The high wages increase cost-push inflation as wages increase firm costs √√
- They also increase demand-pull inflation workers have more disposable income √√
- When firms expect inflation to rise, for example, expecting the price of raw material to increase, they will increase prices to protect their profit margins
 (Accept any other correct relevant response)

TOTAL SECTION B: 80

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(8) **[40]**

(8)

SECTION C

Answer ONE of the two questions from this section in the ANSWER BOOK. Your answer will be assessed as follows.

QUESTION 5

- Compare without graphs the market structure of a monopolistic competition with that of a perfect market focussing on the following:
 - Nature of the product
 - Market information
 - Price determination and demand curve
- Evaluate the importance of South Africa's competition policy in the operation of markets.

INTRODUCTION

A market is an institution/mechanism that brings together the buyers and sellers of a good or service to negotiate about prices and quantities to be traded.

Market structure refers to the way markets are organised.

Max. (2)

MAIN PART

Nature of the product

Perfect market:

- Products sold are homogenous or identical ✓✓
- There is no difference in the products, they are exactly the same in terms of quality and appearance √√
- It makes no difference to a buyer where or from whom to buy the product in a perfect market √√

Monopolistic competition:

- Products sold are differentiated ✓ ✓
- Products may be similar but not identical as there may be differences in packaging and ingredients √√
- The differentiation in products creates a scope for brand loyalty ✓✓
 (Accept any other correct relevant response)
 Max. (8)

Market information

Perfect market:

- Buyers and sellers have full knowledge of the market conditions ✓✓
- All buyers know what the specific characteristics of the good are, how much to pay, the quality and market opportunities ✓✓
- Sellers know the preferences of consumers ✓✓

Monopolistic competition:

- Market information is incomplete for both buyers and sellers ✓✓
- Many brands, enormous variety of products, multiple outlets, diverse location and marginal differences in prices cause a lack of complete information for sellers and buyers ✓✓

(Accept any other correct relevant response)

Max. (8)

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Price determination and demand curve

Perfect market:

- A perfect competitor cannot determine its prices; it takes the price determined by the market √√
- The price in the market is determined by the intersection of demand and supply, ✓✓
 i.e. equilibrium price
- It is therefore a price taker it takes the price as it is from the market and only changes when the market changes √√
- Since it can sell any quantity at the prevailing market price, then the demand curve is perfectly elastic or horizontal ✓√
- The demand curve is also the price of the products ✓✓

Monopolistic competition:

- There is considerable control over the prices of goods and services ✓✓
- It can produce less and charge a higher price ✓✓
- Demand curve is downward sloping (negative) moving from left to right ✓✓
- Demand curve is relatively elastic and represents the average revenue √√
 (Accept any other correct relevant response)
 Max. 10

ADDITIONAL PART

Competition policy is important in:

- providing consumers with competitive prices and product choice ✓✓
- regulating markets and monopolies in the country thereby preventing monopoly growth
- balancing the act of economic transformation that will benefit all South Africans through ownership, participation of SMMEs and employment ✓✓
- declaring practices such as resale price maintenance and horizontal collusion to be unlawful ✓✓
- forcing firms to compete vigorously in terms of prices and quality √√
- fostering restructuring in sectors that have lost competitiveness √√
 (Accept any other correct relevant response)
 (5 x 2) (10)

CONCLUSION

Perfect competition and monopolistic competition are relatively comparable as they have similar characteristics. $\checkmark\checkmark$

(Accept any other correct relevant higher order conclusion)

(2) **[40]**

QUESTION 6

- Discuss in detail how the government can ensure sustainable development.
- How do measures used to pursue high economic growth negatively impact on environmental sustainability?

INTRODUCTION

Environmental sustainability may be described as the development that satisfies the current needs of the people without compromising the quality of the environment so that it remains equally capable of supporting the future generations too. ✓ ✓ (Accept any other low-order introduction)

(2)

MAIN PART

Granting property rights ✓

- Property rights are laws that govern how individuals can control, use, benefit from and transfer resources ✓√
- Property rights have positive conservation effects because they ensure that people take care of the property they own ✓√
- They will use it profitably for as long as possible, even for generations to come ✓✓
- To prevent Fauna and Flora species from becoming instinct, the government can allow people property rights over them √√
- Property owners can then preserve the environment at little cost to taxpayers ✓√
- Property rights can be expanded to common goods such as clean air ✓✓
- Kyoto Protocol is an international agreement whereby developed countries pay developing countries for their right to pollute √√

Pay for environmental use ✓

- The government can protect the environment by imposing user-fees and charges on individuals who use or damage the environment √√
- Government levies fees for waste produced and dumped in the environment √√
- In South Africa local authorities levy charges on rubbish collected and sewage disposal ✓√
- Charges should be proportional to the waste for best results because a fixed total charge will not encourage waste producers to reduce waste √√

Levy environmental taxes ✓

- These are also known as green taxes or eco taxes ✓√
- Government imposes these taxes on consumption of a good that has a negative impact on the environment and is not for the good of the environment √√
- E.g. levy on plastic bags, filament light bulbs, tyres etc. ✓✓
- To achieve a socially efficient output, the rate of tax should be equal to the marginal external cost √√

Pay environmental subsidies ✓

- The government pays a subsidy to firms that enable them to reduce pollution levels by a certain percentage or below a certain level √√
- E.g. government subsidises new technology that saves energy such as energy saving bulbs or solar geysers ✓√

Issue marketable permits ✓

- The government issues a permit to each firm which allows a certain amount of pollution, so this sets a standard √√
- Firms are allowed to trade the permits to other firms that have a larger pollution level √√
- When increasing output, each firm can decide whether it is more profitable to buy permits for additional pollution or to alter its technology to produce less pollution using its current permits ✓✓

Command and control ✓

- Maximum permitted levels are set, e.g. emissions, minimum acceptable levels of environmental quality \(\sqrt{} \)
- Inspectors monitor the activities and impose fines if the legal limits are not respected ✓✓
- There are three approaches to devising command and control system:
 - Quantity standards: ✓ focus on quantities of pollution caused irrespective of the environmental impact, e.g. car gas emissions ✓ ✓
 - Voluntary agreements: ✓ the government tries to enter into voluntary agreements with businesses to cut pollution, rather than imposing laws and regulations. ✓ ✓ These agreements include formal contracts or informal commitments that businesses negotiate to suit their own circumstances ✓ ✓

Education ✓

- It is used to try to change people's attitudes towards the environment ✓√
- Innovative approaches have been tried in the developing world to educate people, e.g. setting up community wildlife reserves √√
- Education should include aspects of indigenous knowledge systems because indigenous people have a broad knowledge of how to live sustainable √√
- People should be made aware of environmental issues and the consequences of their actions √√
- To make their consumption habits more environmentally friendly ✓✓
- Education plays an important role in improving people's ability to manage the environment √√

Voluntary agreements ✓

 The government concludes agreements with businesses on a voluntary basis to cut pollution√√

(Accept any other correct relevant response)
(Maximum of 8 marks for mere listing of facts or examples)

Max. 26

ADDITIONAL PART

Pursuing high economic growth can negatively impact on environmental sustainability by:

- leading to resource depletion and loss of biodiversity which could harm the future carrying capacity of ecological systems for the economy √√
- creating long-term waste and toxins which may have unknown consequences ✓✓
 For example, economic growth has led to the increased use of plastics which are non-degradable ✓✓
 - There is an ever-increasing stock of plastics in the sea and environment which is both unsightly but also damages the wildlife $\checkmark\checkmark$
- leading to the higher consumption of resources, greater pollution and greater demand on natural resources which will harm the environment ✓✓
- imposing high costs on the environment because of increased output and consumption √√, e.g. increased consumption of non-renewable resources, higher levels of pollution and global warming √
- foregoing the opportunity cost of reducing the available non-renewable resources and sustainability of the environment since there is a trade-off between consumer goods and the environment, by increasing the consumption of consumer goods √√ (Accept any other correct relevant response)

 (Max. 10)

CONCLUSION

All individuals, businesses, governments and other organisations should take care of the environment by being engaged in projects that will promote sustainable living. $\checkmark\checkmark$ (Accept any other relevant high-order conclusion)

(2) **[40]**

TOTAL SECTION C: 40
GRAND TOTAL: 150