



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

**ECONOMICS P2
NOVEMBER 2022
MARKING GUIDELINES**

MARKS: 150

These marking guidelines consist of 22 pages.

SECTION A (COMPULSORY)**QUESTION 1****1.1 MULTIPLE-CHOICE QUESTIONS**

- 1.1.1 D - variable ✓✓
 1.1.2 D - monopolistic / C – oligopoly / A - monopoly ✓✓
 1.1.3 B - economic profit ✓✓
 1.1.4 A - productive ✓✓
 1.1.5 B - stagflation ✓✓
 1.1.6 C - eco- ✓✓
 1.1.7 A - preservation ✓✓
 1.1.8 C - Stockholm Protocol ✓✓ (8 x 2) (16)

1.2 MATCHING ITEMS

- 1.2.1 F - The value of inputs owned by the entrepreneur and used in the production process such as opportunity cost ✓
 1.2.2 C - A period of production in which all the factors of production can be varied ✓
 1.2.3 E - A market structure where few large sellers operate ✓
 1.2.4 D - When the private sector fails to provide certain goods and services ✓
 1.2.5 B - Forms part of monetary policy used to control the supply of money ✓
 1.2.6 I - South African citizens travelling within the borders of the country ✓
 1.2.7 A - The introduction of harmful substances into the environment ✓
 1.2.8 H - The gradual overall increase in the temperature of earth's atmosphere ✓ (8 x 1) (8)

1.3 GIVE THE TERM

- 1.3.1 Diseconomies of scale ✓
 1.3.2 Marginal revenue ✓
 1.3.3 Cost - Benefit Analysis ✓
 1.3.4 Demand-pull inflation ✓
 1.3.5 Transit tourists ✓
 1.3.6 Conservation / Environmental sustainability ✓ (6 x 1) (6)

TOTAL SECTION A: 30

SECTION B

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

QUESTION 2: MICROECONOMICS

2.1 Answer the following questions.

2.1.1 **Name TWO types of collusion.**

Overt/explicit/formal ✓

Tacit/implicit/informal ✓

(Accept any other relevant and correct answer) (2 x 1) (2)

2.1.2 **Why does the government provide subsidies to producers?**

Subsidies reduce the cost of production which will encourage producers to increase production of certain goods. ✓✓

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

2.2 **DATA RESPONSE**

2.2.1 **Identify a non-price strategy shown by the above information.**

Door-to-door delivery / online orders / packaging / branding / advertising ✓ (1)

2.2.2 **Name ONE example of a monopolistic competitive industry.**

- Fast Food outlets ✓
- Medical Doctors ✓
- Clothing shops ✓
- Lawyers ✓
- Restaurants ✓
- Retail outlets ✓

(Accept any other relevant and correct answer) (1 x 1) (1)

2.2.3 **Briefly describe the term *patent*.**

A legal right that allows the holder to exclusively produce/manufacture a product for a certain period. / An exclusive right granted to an inventor that protect intellectual property. ✓✓

(Accept any other correct relevant response) (2)

2.2.4 **Why are prices in a monopolistically competitive market lower than the prices of a monopoly?**

- Monopolistically competitive market has greater competition because there are many businesses. ✓✓
- Monopoly market has higher prices because it is a single supplier of a product or service. ✓✓
- Monopoly sells a unique product with no close substitutes. ✓✓
(Accept any other correct relevant response)

(2)

2.2.5 **Explain the benefits of product differentiation to producers of goods and services.**

- Producers will benefit because their products will be easily recognisable from similar products of other businesses. ✓✓
- When consumers are able to identify with the product, brand loyalty is developed which will benefit the producer. ✓✓
- Producers will earn more revenue/profit from goods that show a relatively inelastic demand. ✓✓
- Producers can easily penetrate the market and gain more market share through product differentiation. ✓✓
(Accept any other relevant and correct response)

(2 x 2)

(4)

2.3 **DATA RESPONSE**

2.3.1 **Identify the market price in the graph above.**

R18 ✓

(1)

2.3.2 **Name any ONE product on which the government can impose a maximum price.**

- Bread ✓
- Milk ✓
- Eggs ✓
- Mealie meal ✓
- Paraffin ✓
(Accept any other correct relevant response)

(1)

2.3.3 **Briefly describe the term *minimum price*.**

A lowest price set by the government above the market price to allow producers to make a fair profit. ✓✓
(Accept any other correct relevant response)

(2)

2.3.4 **Why would the government intervene in the market by levying taxes on demerit goods?**

- To discourage the production and/or consumption of demerit goods. ✓✓
 - Taxes help increase the prices of the goods thereby making them expensive for households to buy. ✓✓
 - To discourage the importation of demerit goods. ✓✓
- (Accept any other correct relevant response)

(2)

2.3.5 **How would maximum prices influence the economy?**

- Consumers demand more goods (1200) due to low prices and producers supply less (500) ✓✓
 - Excess demand for goods will result in a shortage of goods which means that consumers may fail to access the product in the market ($1200 - 500 = 700$) ✓✓
 - Maximum prices can result in black markets where producers will supply goods at high prices. ✓✓
 - Decline in tax revenue because sellers in the black market do not pay tax. ✓✓
 - Decrease in production of the product may result in loss of jobs and slow down economic growth ✓✓
- (Accept any other correct relevant response)

(2 x 2)

(4)

2.4 **Use the graph below to explain the effect of negative externalities on the market.**

- When the market is left to its own devices, a quantity Q will be produced at price P. ✓✓
- Market equilibrium point 'e' represents social inefficiency because MPC is equal to MPB. ✓✓
- When the external cost (negative externality) is taken into account the cost of production will increase and the supply curve will shift from SS (MPC) to S1S1 (MSC). ✓✓
- A higher price P1 will be charged for goods with negative externality and lower quantity Q₁ will be produced. ✓✓
- At equilibrium point e₁ the quantity produced represents social efficiency because MSC is equal to the price. ✓✓
- The shaded area represents the negative externality (welfare loss) to the society. ✓✓

(Accept any other correct relevant response)

(A maximum of 4 marks may be allocated for correct explanation without direct reference to graph)

(8)

2.5 **How does mutual dependence influence the behaviour/actions of firms in the oligopoly market?**

- Mutual dependence results in businesses monitoring other firms because the actions of one influence others. ✓✓
- When one firm launches a sales promotion initiative other firms will do the same to retain their customers. ✓✓
- Price wars may occur if one firm reacts to a price reduction of another firm. ✓✓
- Continuous reaction to price decreases will drive prices down towards a cost of production which may force firms out of the market. ✓✓
- To avoid price wars oligopolists will charge a price at the kink of the demand curve. ✓✓
- To improve profits or reduce uncertainties in their behaviour, oligopolists tend to collude with others. ✓✓
- When one firm decides to increase the price, other businesses may keep their prices constant resulting in the loss of market share as well total revenue. ✓✓
- Oligopolistic firms will use non-price strategy such as advertising to increase market share. ✓✓

(Accept any other correct relevant response)

(A maximum of 2 marks may be allocated for mere listing of facts/examples)

(8)
[40]

QUESTION 3: CONTEMPORARY ECONOMIC ISSUES

3.1 Answer the following questions.

3.1.1 **Name any TWO types of consumer inflation.**

- Headline (CPI) ✓
 - Core ✓
 - Administered price ✓
- (2 x 1) (2)

3.1.2 **How do households benefit from tourism?**

- Members of households earn income directly from the tourism sector as tour operators, travel agents. ✓✓
 - Many households are indirectly involved in tourism as employees. ✓✓
 - Entrepreneurs from households that operate as curio producers or musicians can earn income from tourism. ✓✓
 - A large number of households acquire skills in the tourism industry. ✓✓
 - Tourism encourages rural development because many tourist attractions are located in rural areas. ✓✓
 - Local people benefit from improved infrastructure that was meant for tourists. ✓✓
- (Accept any other correct relevant response) (1 x 2) (2)

3.2 **DATA RESPONSE**

3.2.1 **Identify the base year in the table above?**

2018 ✓ (1)

3.2.2 **Name the Institution that is responsible for controlling inflation in South Africa.**

The South African Reserve Bank (SARB) ✓ (1)

3.2.3 **Briefly describe the term *hyperinflation*.**

It is a type of inflation whereby prices rise so rapidly that people lose confidence in the value of money. / Occurs when the inflation rate is so high that it can be described as out of control ✓✓
(Accept any other correct relevant response) (2)

3.2.4 **Explain the importance of measuring inflation in the economy.**

- To determine whether the inflation rate is still within the target range. ✓✓
 - It helps policy makers to make informed decisions relating to monetary policy. ✓✓
 - To measure the cost of living which is used for collective bargaining. ✓✓
- (Accept any other correct relevant response) (2)

3.2.5 Use the information in the table above to calculate the inflation rate from 2020 to 2021.

$$\frac{109,5 - 107}{107} \times \frac{100}{1}$$

= 2,3% / 2% (4)

3.3 DATA RESPONSE

3.3.1 Identify a type of tourism that gives an opportunity to experience traditions in a community.

Cultural (1)

3.3.2 Name any ONE world heritage site in South Africa.

- Mapungubwe ✓
- Vredefort Dome ✓
- Sterkfontein caves / Cradle of human-kind ✓
- Robben Island ✓
- iSimingaliso / Greater St Lucia wetland park ✓
- uKhahlamba-Drakensburg Park ✓
- Khomani Cultural Landscape ✓
- Cape Fynbos region / Table Mountain ✓
- Richtersveld Cultural and Botanical Landscape ✓
- Barberton Makhonjwa Mountains ✓ (1)

3.3.3 Briefly describe the term *tourism*.

The activity of people travelling to and staying in places outside their usual environment for no more than one year for leisure, business or other purpose. ✓✓
(Accept any other correct relevant response) (2)

3.3.4 Why is tourism growth important to the government?

- The tax base for the government will expand which will increase the tax revenue. ✓✓ For example, through increased airport departures taxes, air ticket taxes and taxes on hotel rooms. ✓
- Tourism helps the government to reduce poverty and unemployment at no or little cost. ✓✓
- Tourism may help to create a positive image or international relations and attract foreign investments. ✓✓
- Enables government to achieve its socio-economic objectives of informal sector growth, black economic empowerment and SMME development. ✓✓
- Helps to generate foreign exchange in the country ✓✓
(Accept any other correct relevant response) (2)

3.3.5 **How can crime as a socio-economic issue negatively influence the tourism sector?**

- High crime levels give a negative perception of the country as a tourism destination hence discouraging tourists. ✓✓
- The profits in the tourism industry will fall due to a decrease in the number of visits. ✓✓
- The tourism industry will shed jobs as a result of a decrease in tourism activities. ✓✓

(Accept any other correct relevant response)

(2 x 2)

(4)

3.4 **Discuss the reasons for the growth of the tourism industry in South Africa.**

- Increased disposable income leaves people with money to spend on tourism activities. ✓✓
- Less working hours allow South Africans more time to travel as many people travel during public holidays or long weekends. ✓✓
- More people have become aware of the importance for leisure and recreation. ✓✓
- Improved transport, communication and accommodation facilities make it easier for tourists to travel to various places. ✓✓
- Increased advertising and promotion make people aware of tourist destinations. ✓✓
- South Africa has a wide range of tourist attractions such as Wildlife parks, heritage sites, museums, botanical gardens for local people to visit. ✓✓
- There is improved infrastructure and competitive transport system which makes travelling more convenient and cheaper. ✓✓ e.g. airlines, minibuses and rail transport. ✓
- Improvement in economic growth and increase in disposable income especially among black people has enabled more South Africans to afford holidays. ✓✓
- Travelling for business purposes has increased as many people participate in economic activities. ✓✓ E.g. business conferences ✓
- Increased advertising campaigns such as "Sho't Left" promotes South Africans to travel within their country. ✓✓
- Socio-economic factors such as migrant workers in urban areas visiting relatives in rural areas have increased the number of people travelling. ✓✓
- The transformation of South Africa into a democratic society made more people to feel free when travelling to different parts of the country. ✓✓
- Hosting of international events such as soccer and rugby world cup tournaments have increased the number of foreign tourists. ✓✓
- Ease of obtaining VISAS and foreign exchange have increased the influx of foreign tourists in SA. ✓✓
- The depreciation of the rand made it cheaper for foreign tourists to spend money in SA. ✓✓

(Accept any other correct relevant response)

(A maximum of 4 marks may be allocated for mere listing of facts/examples)

(4 x 2)

(8)

3.5 How would an increase in the prices of imported key inputs such as oil affect the domestic economy?

- When the prices of key inputs that are imported increase, the domestic cost of production increases especially in the manufacturing sector. ✓✓
- Production of goods and services will decrease resulting in low economic growth. ✓✓
- Unemployment will increase as businesses retrench some of their workers. ✓✓
- Producers increase the prices of their goods to compensate for the loss of profits, which will stimulate cost-push inflation. ✓✓
- High costs of crude oil will lead to an increase in the prices of fuel resulting in high transport costs. ✓✓
- Investors may be discouraged to invest due to increased cost of doing business. ✓✓
- The country's exports may decrease due to an increase in domestic prices of goods and services. ✓✓
- The trade balance of the current account may therefore be reduced as a result of a decrease in exports. ✓✓
- The country will earn less foreign exchange/currency and making it more difficult to pay for imports. ✓✓
- Increase in oil prices may result in higher fuel prices which may increase cost of production for different industries. ✓✓
- Increase in prices of agricultural inputs such as fertilisers and other chemicals may result in higher food prices in the economy. ✓✓
- Increased cost of importing machinery and equipment may lead to low production of goods and services. ✓✓

(Accept any other correct relevant response)

(A maximum of 2 marks may be allocated for mere listing of facts/examples)

(4 x 2)

(8)
[40]

QUESTION 4: MICROECONOMICS AND CONTEMPORARY ECONOMIC ISSUES

4.1 Answer the following questions.

4.1.1 **Name any TWO examples of merit goods.**

- Education ✓
- Health care ✓
- Safety ✓
- Disaster management ✓

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

4.1.2 **Explain the effect of a decrease in interest rate on inflation.**

A decrease in interest rate will encourage people to borrow more money and thereby increasing aggregate demand which leads to an increase in demand-pull inflation. / Lower interest rate may reduce cost of production which may reduce cost-push inflation. ✓✓
(Accept any other correct relevant response) (1 x 2) (2)

4.2 **DATA RESPONSE**

4.2.1 **Identify the loss minimising (equilibrium) point in the graph above?**

C ✓ (1)

4.2.2 **What is the nature of the product sold in a monopoly?**

Unique / has no close substitutes ✓
(Accept any other relevant and correct response) (1)

4.2.3 **Briefly describe the term *natural monopoly*.**

A monopoly that exists due to barriers to entry that are economic in nature such as high development costs / powerful economies of scale / exclusive access to natural resources / high fixed cost. ✓✓
(Accept any other relevant and correct response) (2)

4.2.4 **Why does a monopoly usually make an economic profit in the long run?**

- A monopoly is a price setter, it can easily manipulate its prices to make economic profit. ✓✓
- A monopoly market has barriers to entry, such as patents, which restrict new firms from entering the market. ✓✓
(Accept any other relevant and correct response) (2)

4.2.5 **Use the information in the graph above to calculate the economic loss made by the firm. Show ALL calculations**

$$\begin{aligned}\text{Economic loss} &= \text{TR} - \text{TC} \\ &= (\text{R}40 \times 500) \checkmark - (\text{R}50 \times 500) \checkmark \\ &= \text{R}20\,000 - \text{R}25\,000 \checkmark \\ &= \underline{\underline{-\text{R}5\,000}} \checkmark\end{aligned}$$

OR

$$\begin{aligned}\text{Economic loss} &= (\text{AR} - \text{AC}) \times \text{Q} \\ &= (\text{R}40 - \text{R}50) \checkmark \times 500 \checkmark \\ &= -\text{R}10 \times 500 \checkmark \\ &= \underline{\underline{-\text{R}5\,000}} \checkmark\end{aligned}\quad (4)$$

4.3 **DATA RESPONSE**

4.3.1 **Identify the cause of cost-push inflation in the cartoon above.**

Wages \checkmark (1)

4.3.2 **Name ONE way that is used to measure inflation.**

- Indexes (CPI and PPI) \checkmark
 - Weighting \checkmark
 - Inflation rate \checkmark
 - Implicit GDP deflator \checkmark
- (1)

4.3.3 **Briefly describe the term *inflation*.**

Inflation is a sustained and significant increase in the general price level over a period of time. $\checkmark\checkmark$
(Accept any other correct relevant response) (2)

4.3.4 **Explain the effect of a decrease in the general price level on producers.**

- Producers will earn less revenue resulting in lower profits. $\checkmark\checkmark$
 - Producers may leave the market for other profitable business ventures. $\checkmark\checkmark$
 - Low prices will result in businesses reducing their production levels and employ less workers. $\checkmark\checkmark$
 - Producers may access some of their inputs at a lower cost which will reduce cost of production. $\checkmark\checkmark$
- (Accept any other correct and relevant response) (2)

4.3.5 **How can the government use the fiscal policy to combat demand-pull inflation?**

The government can combat demand-pull inflation by:

- increasing the level of taxation to decrease disposal income and curb excess demand and spending. ✓✓
- implementing or increasing surcharge on imported goods to curb the buying of imported goods. ✓✓
- cutting back on spending such as cancelling infrastructure development project, ✓✓ e.g. building of dams and public buildings. ✓
- borrowing less to finance expenses thereby not contributing to an increase of money in circulation. ✓✓

(Accept any other correct relevant response)

(2 x 2)

(4)

4.4 **Briefly discuss *lack of information* and *immobility of factors of production* as causes of market failure.**

Lack of information

- Lack of information results in resources not being allocated efficiently. ✓✓
- Consumers do not have perfect information to make rational decisions when buying goods and services although technology does offer some information. ✓✓
- Workers are often unaware of job opportunities outside their current employment. ✓✓
- Entrepreneurs lack of information on costs, availability and productivity of factors of production reduces their effectiveness. ✓✓

Immobility of factors of production

- The immobility of factors of production results in most markets failing to adjust rapidly to changes in supply and demand. ✓✓
- Labour takes time to move into new occupations and areas to meet changes in consumer demand. ✓✓
- The supply of skilled labour cannot be increased because of the time it takes to be trained or educated. ✓✓
- Physical capital, like factory buildings or infrastructure such as telephone lines cannot be reallocated easily. ✓✓
- When technology changes, firms take time to update the skills of their workers. ✓✓

(Accept any other correct relevant response)

(A maximum of 4 marks may be allocated for mere listing of facts/examples)

(2 x 4)

(8)

4.5 **How would an increase in tourism activities negatively impact on the environment?**

Tourism can create environmental damage through:

- permanent restructuring of the landscape such as construction work on highways. ✓✓
- additional waste products, both biological and non-biological waste such as sewage, carbon emissions and littering. ✓✓
- direct environmental stress such as loss of wildlife species due to safari hunting. ✓✓
- negative effect on the population dynamics such as migration and changes in population density in response to the needs of tourist sites. ✓✓
- noise pollution in wildlife parks which may result in relocation of animals. ✓✓
- destruction of vegetation as a result of activities of tourists in undisturbed nature such as river mouth eco-system and botanical gardens. ✓✓
- increase in demand for goods and services which may put pressure on the supply of natural resources. ✓✓

(Accept any other correct and relevant response)

(A maximum of 2 marks may be allocated for mere listing of facts/examples)

(8)
[40]

TOTAL SECTION B: 80

SECTION C

Answer any ONE of the two questions in this section in the ANSWER BOOK.

QUESTION 5: MICROECONOMICS

- With the aid of three separate graphs, discuss the short-run equilibrium positions (*economic profit, economic loss and normal profit*) in a perfect market. (26 marks)
- Analyse the advantages of perfect competition as a market structure. (10 marks)

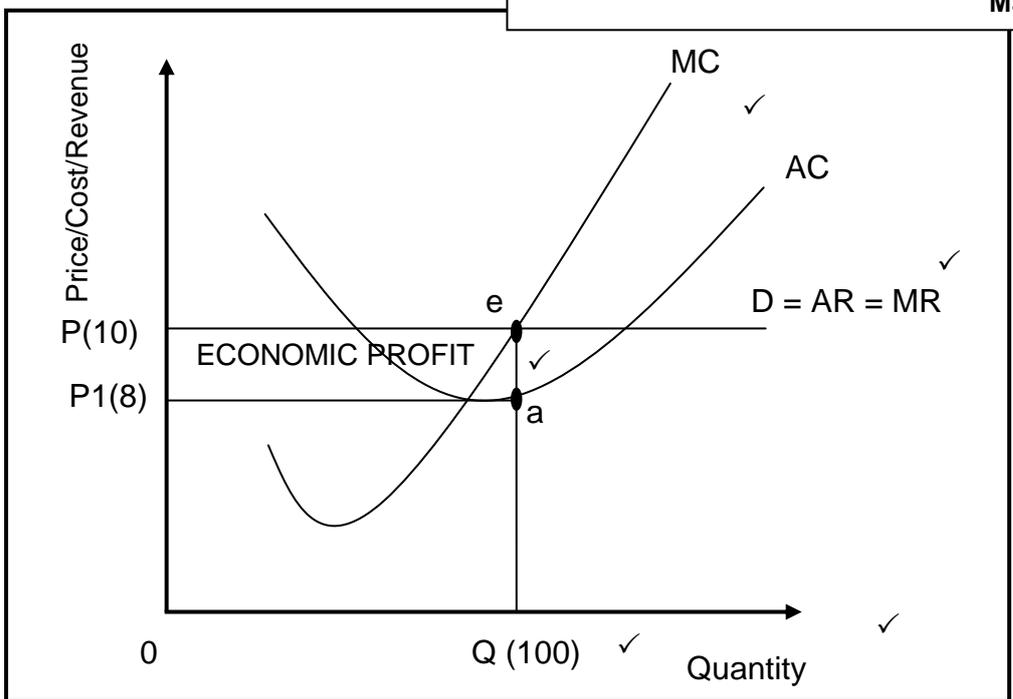
INTRODUCTION

A perfect competitor is a market structure with a large number of buyers and sellers. ✓✓ (Max 2)
(Accept any other suitable introduction)

BODY: MAIN PART

ECONOMIC PROFIT

Correct positioning and labelling of cost curves = 1 mark
 Correct positioning and labelling of revenue curves = 1 mark
 Indication of economic profit area = 1 mark
 Labelling on axes = 1 mark
 Labelling of axes = 1 mark
Max 4 marks

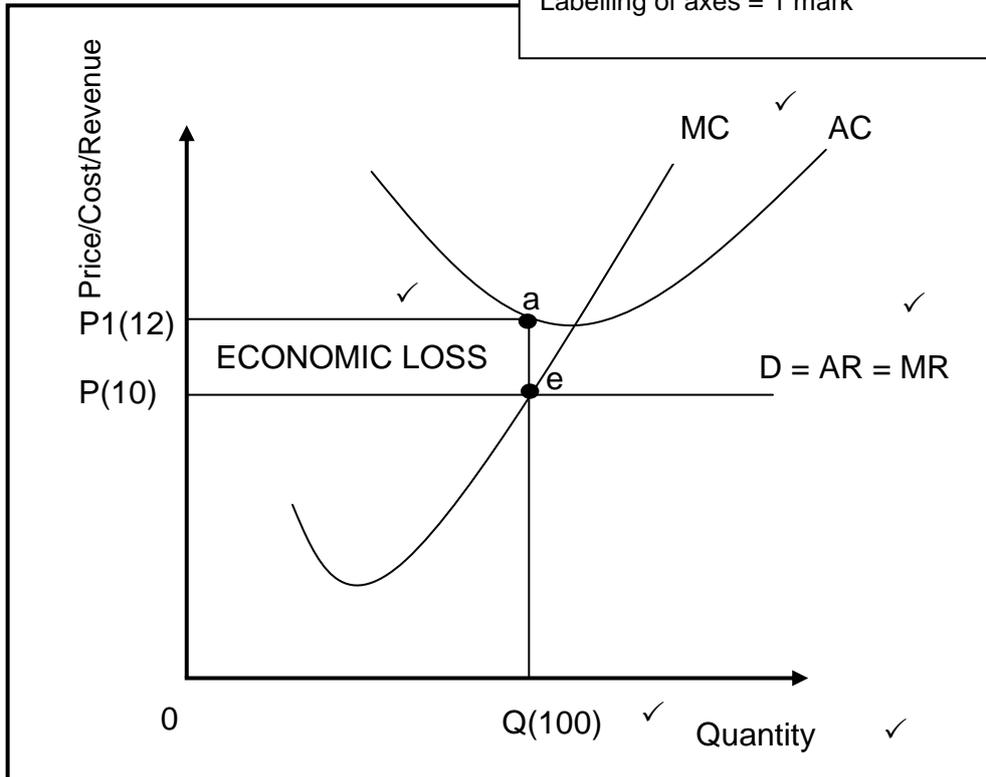


- Economic profit is the profit that is made in addition to the normal profit/When average revenue is greater than average cost the firm makes economic profit. ✓✓
- The firm produces at point e where MR=MC ✓✓.
- At e, Q/100 units are produced at P/R10. ✓✓
- At point e, AR (P/R10) is greater than AC (P1/R8). ✓✓
- The firm makes an economic profit of $PeaP1 / TR - TC (R1000 - R800 = R200) / R2 \times 100 = R200$. ✓✓

ECONOMIC LOSS

Correct positioning and labelling of cost curves = 1 mark
 Correct positioning and labelling of revenue curves = 1 mark
 Indication of economic loss area = 1 mark
 Labelling on axes = 1 mark
 Labelling of axes = 1 mark

Max 4 marks

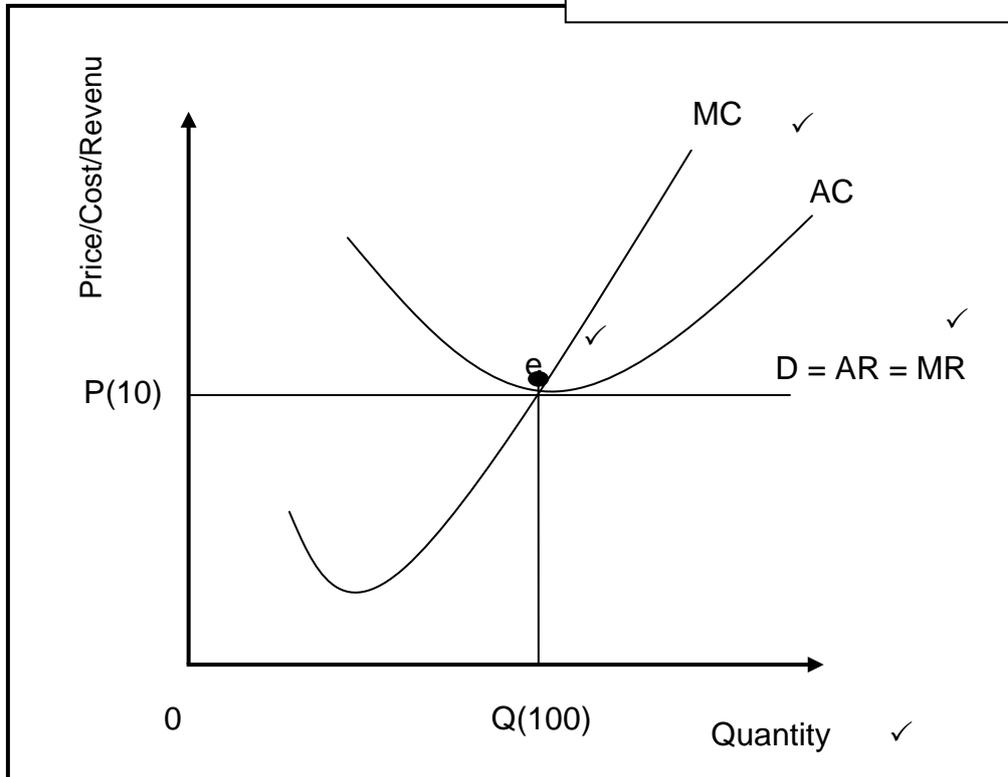


- Economic loss occurs when total costs are greater than the total revenue/when average revenue is lower than the average cost. ✓✓
- The firm produces at point e where MR=MC. ✓✓
- At e, Q/100 units are produced at P/R10. ✓✓
- At point e, AR (P/R10) is less than AC (P1/R12). ✓✓
- The firm makes an economic loss of $PP1ae / TR - TC (R1000 - R1200 = - R200) / R10 - R12 = - R2$. ✓✓

NORMAL PROFIT

Correct positioning and labelling of cost curves = 1 mark
 Correct positioning and labelling of revenue curves = 1 mark
 Indication of break-even point = 1 mark
 Labelling of axes = 1 mark
 Labelling on axes = 1 mark

Max 4 marks



- Normal profit is the minimum earnings required to prevent the entrepreneur from leaving the industry. ✓✓
- Normal profit occurs when total revenue equals total cost/ when average revenue equals average cost. ✓✓
- The firm produces at point e where MR=MC. ✓✓
- At e, Q/100 units are produced at P/R10. ✓✓
- At point e, AR (P/R10) is equal to AC (P/R10). ✓✓
- The firm makes normal profit of $P \times Q - AC \times Q / R1000 - R1000 = R0 / R10 - R10 = R0$. ✓✓

(Max 26)

Additional instructions:

- Mark allocation for graphs= **max 12 marks**
 - Max 12 marks for 3 graphs
 - Max 8 marks for 2 graphs
 - Max 4 marks for 1 graph
- Mark allocation for explanations of graphs = **max 14 marks**

ADDITIONAL PART

- The costs of production are lower due to allocative efficiency. ✓✓
- There are no barriers to entry in the market, aspiring businesses can easily enter the market. ✓✓
- Perfect market increases competition which lowers the prices for the consumer. ✓✓
- A perfect competitor produces large quantities and sell at lower prices which benefits the consumers. ✓✓
- The products are already known in the market therefore producers save on advertising costs. ✓✓
- Consumers are not exploited since perfect competitors are price takers and sell at a market price. ✓✓
- The costs of production are lower as the firms produce at the lowest point of the average cost curve. ✓✓

(Accept any other relevant and correct response)

(A maximum of 2 marks may be allocated for mere listing of facts/examples)

(Max 10)

CONCLUSION

Businesses under perfect competition can only realise normal profits in the long-run. This is due to the number of businesses entering in the market to share in the profits being made in the short-run. ✓✓

(Accept any other correct relevant conclusion)

(Max 2)

[40]

QUESTION 6: CONTEMPORARY ECONOMIC ISSUES

- **Discuss in detail the measures taken by the government to ensure environmental sustainability. (26 marks)**
- **Evaluate the success of international agreements in reducing climate change. (10 marks)**

INTRODUCTION

Environmental sustainability refers to the ability of the environment to survive its use for economic activity / Environmental sustainability means meeting the needs of the present generation without compromising the needs of future generations. ✓✓

(Accept any other correct relevant introduction) (Max. 2)

BODY: MAIN PART**Granting property rights ✓**

- Property rights are legal titles to the ownership, use and disposal of factors of production and goods and services. ✓✓
- Property rights have a conservationist effect whereby people will take care of resources that belong to them. ✓✓
- Property rights promote collective responsibility towards the environment while at the same time preventing overexploitation. ✓✓
- To prevent fauna and flora species from becoming extinct, people are granted property rights if they agree to preserve the flora and fauna. ✓✓
- Property rights can be expanded to common resources such as clean air. ✓✓

Charging for the use of the environment ✓

- The government levies fees for waste produced and disposed of in the environment. ✓✓
- In South Africa, local authorities levy charges on rubbish collection and sewage disposal. ✓✓
- The best results are achieved when charges are proportional (related to) to waste produced. ✓✓
- Emission charges are used when the government sets a price per unit of pollution. ✓✓

Levying environmental taxes ✓

- Environmental taxes are taxes imposed on the output of goods that generate external environmental costs (pollution). ✓✓
- When environmental taxes are levied it ensures that practices that are harmful to the environment are reduced. ✓✓
- The government can use the income generated through environmental taxes to plough back into environmental issues. ✓✓
- In South Africa, carbon tax is levied on carbon dioxide emissions from industrial process, fuel burning and vehicle tyres. ✓✓
- The rate of environmental tax should be equal to the marginal external cost. ✓✓

Paying environmental subsidies ✓

- Environmental subsidies refer to the payment made by the government to businesses to reduce activities that negatively affect the environment. ✓✓
- Subsidies are granted to; -
 - encourage businesses to develop new technologies or equipment such as LED light bulbs and solar geysers. ✓✓
 - promote production of environmentally-friendly substitutes such as reusable shopping bags and rechargeable batteries. ✓✓
 - encourage recycling waste material such as bottles and cans. ✓✓
 - encourage businesses to use environmentally-friendly sources of energy such as solar and wind. ✓✓
- Environmental subsidies can be recovered from the levying of taxation. ✓✓

Issuing marketable permits ✓

- Marketable permits are licenses that are sold by the government to businesses which allow them to pollute to a certain degree. ✓✓
- The government decides on a maximum desired level of pollution in a particular area. ✓✓
- When businesses managed to reduce pollution below their maximum allocated quota, they can sell the remaining part to other businesses that pollute more than their allocated quotas. ✓✓
- In South Africa, marketable permits are granted by the Department of Mineral Resources and Energy. ✓✓

Command and Control (CAC) ✓

- CAC refers to regulations set by the government to enforce environmental limits and standards. ✓✓
- The government enforces policy by setting maximum levels of the emission of pollution. ✓✓
- The Department of Environmental Affairs assigns inspectors to monitor the environmental activities of businesses and impose fines if the legal limits are not adhered to. ✓✓
- Most developed countries have regulations that control air and water pollution. ✓✓
- There are 3 approaches in CAC systems:
 - Quantity standards:** These focus on the amount of pollution emitted. ✓✓
 - Quality standards:** These focus on the environmental impact of the pollution emitted. ✓✓
 - Social impact standards:** These focus on the effect on people of the pollution emitted. ✓✓

Voluntary agreements ✓

- Voluntary agreements refer to formal and informal arrangements, rather than imposing regulations, between the government and businesses to reduce pollution. ✓✓
- The government may conclude agreements with businesses on a voluntary basis to cut pollution. ✓✓
- These agreements often work well because businesses are empowered to negotiate arrangements that suit their own circumstances and create better platform for planning. ✓✓
- This ensures commitment by businesses as they uphold to agreements that they have negotiated since they are directly involved. ✓✓

Education ✓

- This refers to methods used to create awareness and change people's attitudes towards the environment. ✓✓
- Education is used to try to change people's attitudes towards the environment. ✓✓
- When the society is made aware of environmental issues and how their actions impact on the environment, it will ensure that better decisions are made. ✓✓
- When children are educated to be conscious of the effects of their actions on the environment, they will become more environmentally aware and empowered adults. ✓✓
- Innovative approaches have been tried in the developing countries to educate people. ✓✓ e.g. setting up community wildlife reserves. ✓
(Accept any other correct relevant response)

(A maximum of 8 marks may be allocated for mere listing of facts/examples)

(Max. 26)

ADDITIONAL PART

- United Nations Framework Convention on Climate Change (UNFCCC) was established to reduce greenhouse gas emissions in the atmosphere. ✓✓
- Most countries agree on taking measures to protect the environment, but they differ on who is most responsible for the damage and how to set emissions-reduction goals. ✓✓
- The UNFCCC did not succeed because it was voluntary for individual countries. ✓✓
- Kyoto Protocol was an improvement on the UNFCCC as it attempted to get developed countries to commit to reducing their emission of greenhouse gases. ✓✓
- Kyoto protocol established binding targets whereby industrialised countries agreed to reduce their emissions. ✓✓
- The major shortcoming of Kyoto protocol was its focus on developed countries only and developing countries were excluded from the agreement. ✓✓
- Kyoto protocol failed as countries that did not meet targets were not penalised. ✓✓
- Major polluters like the USA pulled out and this impacted negatively on the success of the agreement. ✓✓
- The Paris Agreement was an improvement on the Kyoto protocol as its goal is to limit global warming to well below 2, preferably to 1,5 degrees Celsius, compared to pre-industrial levels. ✓✓
- Assistance in the form of subsidies was pledged to developing countries to reduce greenhouse emissions ✓✓
- The success of Paris Agreement will be determined by the financial, technical, and capacity building support offered to countries who need it. ✓✓
- Although international agreements had limited success thus far, it has created an awareness to address the problem seriously. ✓✓
- Global warming targets are not met as we are fast approaching an increase in global temperatures of 2 degrees Celsius. ✓✓
- Poorer countries still rely on coal to produce energy because using more environmentally friendly methods of production are too expensive. ✓✓
- Emission targets are not met, and the effects of climate change is more visible than before, leading to a loss in GDP and a decrease in employment. ✓✓
- It is difficult to identify organisations responsible and holding these countries responsible for their actions. ✓✓
- There is a lack of strict law enforcement where penalties were not imposed on those who did not meet the targets. ✓✓
- Big polluters (like the USA) failed to meet the targets set by Kyoto protocol and still contribute to global warming and are less interested in solving the crises due to expensive technology to reduce pollution. ✓✓

(Accept any other correct relevant response)

(A maximum of 2 marks may be allocated for mere listing of facts/examples)

(Max. 10)

CONCLUSION

People continue to damage the environment (with or without their knowledge) and leaving the future generations to suffer the consequences. ✓✓

(Accept any other correct relevant high order conclusion)

(Max. 2)

[40]

TOTAL SECTION C:

40

GRAND TOTAL:

150