



# NATIONAL SENIOR CERTIFICATE

**GRADE 11**

**NOVEMBER 2024**

**GEOGRAPHY P2**

**MARKS: 150**

**TIME: 3 hours**



This question paper consists of 19 pages.

**INSTRUCTIONS AND INFORMATION**

1. This question paper consists of TWO SECTIONS.

**SECTION A:**

QUESTION 1: DEVELOPMENT (60)

QUESTION 2: RESOURCES AND SUSTAINABILITY (60)

**SECTION B:**

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES (30)

2. Answer all THREE questions.
3. ALL diagrams are included in the QUESTION PAPER.
4. Leave a line between subsections of questions answered.
5. Start EACH question at the top of a NEW page.
6. Number the questions correctly according to the numbering system used in this question paper.
7. Do NOT write in the margins of the ANSWER BOOK.
8. Draw fully labelled diagrams when instructed to do so.
9. Answer in FULL SENTENCES, except when you have to state, name, identify or list.
10. Units of measurement MUST be indicated in your final answer, e.g. 1 020 hPa, 14 °C and 45 m.
11. You may use a non-programmable calculator.
12. You may use a magnifying glass.
13. Write neatly and legibly.

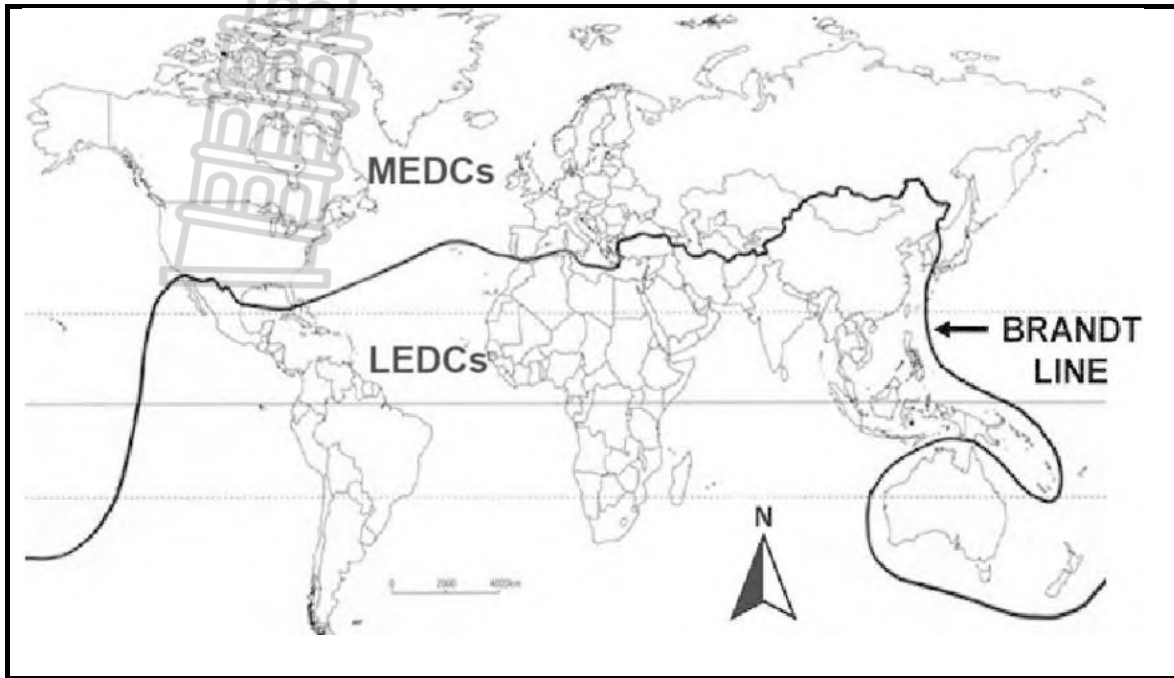
**SPECIFIC INSTRUCTIONS AND INFORMATION FOR SECTION B**

14. A 1 : 50 000 topographical map of MBOMBELA 2530BD and a 1 : 10 000 orthophoto map of (MBOMBELA 2530 BD) of a part of the mapped area are provided.
15. The area demarcated in RED/BLACK on the topographic map represents the area covered by the orthophoto map.
16. Marks will be allocated for steps in calculations.
17. You must hand in the topographical and the orthophoto map to the invigilator at the end of this examination session.



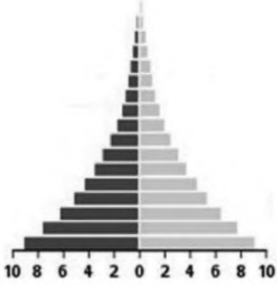


**SECTION A: DEVELOPMENT AND RESOURCES AND SUSTAINABILITY**

**QUESTION 1: DEVELOPMENT**

1.1 Refer to the map showing the 'North-South' divide. Complete the statements in COLUMN A with the options in COLUMN B. Write only **X** or **Z** next to question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, for example 1.1.9 Z.



COLUMN A		COLUMN B	
1.1.1	Developing countries based on economic and social criteria:	<b>X</b>	South of the Brandt Line
		<b>Z</b>	North of the Brandt Line
1.1.2	Brazil, India and South Africa are considered:	<b>X</b>	Newly industrialising countries
		<b>Z</b>	Industrialised countries
1.1.3	The employment structure in MEDCs:	<b>X</b>	<p><b>PRIMARY SECTOR</b></p> <p><b>SECONDARY SECTOR</b></p> <p><b>TERTIARY SECTOR</b></p>
		<b>Z</b>	

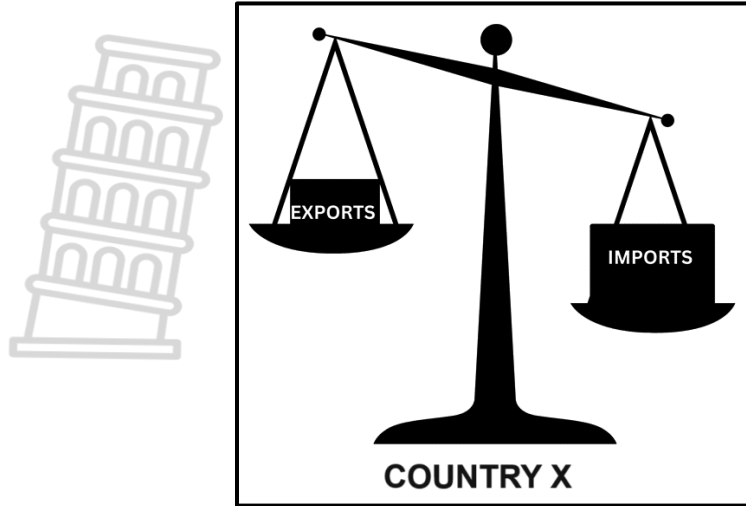
<p>1.1.4 The population pyramid typical of a LEDC:</p> 	<p>X </p> <p>Z </p>
<p>1.1.5 The proportion of people living in urban areas in a MEDC:</p>	<p>X </p> <p>Z </p>
<p>1.1.6 A factor that would contribute positively to a country's HDI:</p>	<p>X Higher literacy rates Z Decreased life expectancy</p>
<p>1.1.7 A country that has a Gini coefficient score close to 1:</p>	<p>X Income equality Z Income inequality</p>
<p>1.1.8 An economic indicator that measures the overall economic performance of a country:</p>	<p>X Gross Domestic Product Z Level of unemployment</p>

(8 x 1) (8)



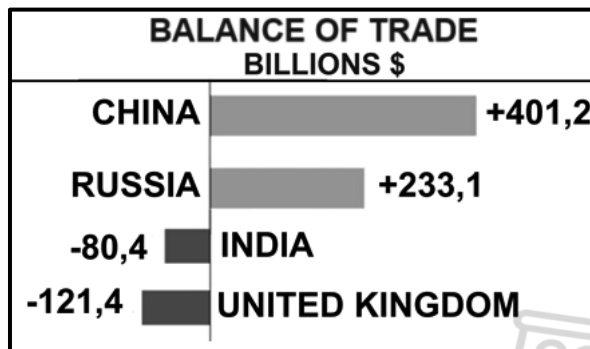
1.2 Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (1.2.1 to 1.2.7) in the ANSWER BOOK, for example 1.2.8 D.

1.2.1 Country X has a negative balance of trade because ...



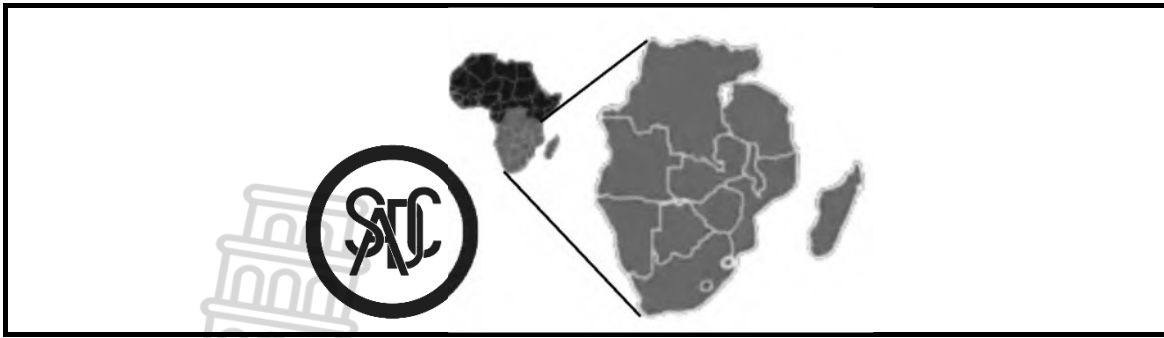
- A its exports are greater than its imports.
- B its exports and imports are equal amounts.
- C its imports are greater than its exports.
- D it has no international trade activity.

1.2.2 The country that has the biggest trade surplus:



- A China
- B Russia
- C India
- D United Kingdom

Refer to the map and answer QUESTIONS 1.2.3 and 1.2.4.



1.2.3 SADC stands for:

- A South African Development Community
- B Southern African Development Countries
- C Southern African Development Community
- D South African Developing Countries

1.2.4 A key economic benefit of SADC's free trade agreements:

- A A common currency
- B Removing competition
- C Barriers to entry for businesses
- D Enhanced access to international markets

1.2.5 Fair Trade is a type of trading relationship based on the principle of:

- A Reducing environmental regulations
- B Transparency and accountability in the supply chain
- C Increasing profits by reducing production costs
- D Prioritising local markets over global markets

1.2.6 Financial assistance from the government to help local businesses compete against foreign imports:

- A Quota
- B Tariff
- C Subsidy
- D Embargo

1.2.7 The main difference between a tariff and an import quota:

- (i) Tariffs are taxes on imports
- (ii) Import quotas limit quantity of imports
- (iii) Tariffs are taxes on exports
- (iv) Import quotas encourage more imports

- A (i) and (ii)
- B (ii) and (iii)
- C (iii) and (iv)
- D (i) and (iv)

(7 x 1) (7)

1.3 Refer to the extract below on rural community development.


**EMPOWERING RURAL COMMUNITIES: INVESTING IN WOMEN**

Rural communities and rural women in particular, bear the largest burden of poverty in South Africa. The main factors contributing to the poverty of rural women include low literacy and skills training and poor access to services, especially healthcare.


Investing in women is an imperative to development. Women often have different needs than men due to their societal standing, as well as continuing imbalance in the divisions of labour for managing or undertaking domestic tasks, such as taking care of or raising children.

The Kwanalu’s Women and Youth in Rural Entrepreneurship (WYRE) initiative aims to strengthen KZN’s rural and farming communities. Its goal is to build productive and sustainable family and community livelihoods.


Through WYRE’s programme, women who are part of the community development programme receive the following support:




**AGRICULTURAL TRAINING**



**FINANCIAL AND BUSINESS MANAGEMENT TRAINING**



**ACCESS TO FINANCE**



**NETWORKING: LINKING WOMEN ACROSS AFRICA**

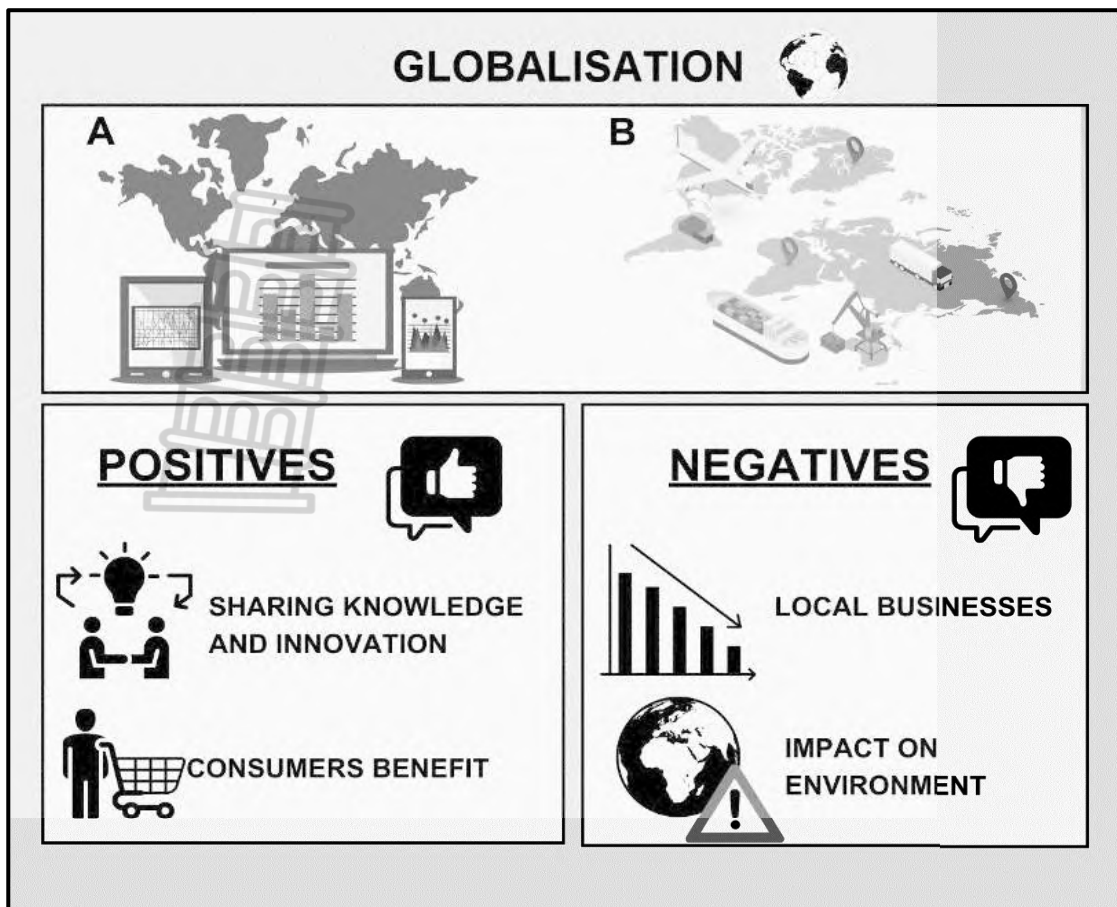
The WYRE programme is not only enhancing the skills and leadership qualities of its participants, but is also playing a crucial role in the sustainable development of rural economies in KZN, fostering a new generation of entrepreneurial leaders in agriculture.

[Adapted from [www.foodformzansi.co.za/-kwanalu-empowers-rural-entrepreneurs-in-kzn/](http://www.foodformzansi.co.za/-kwanalu-empowers-rural-entrepreneurs-in-kzn/)]

- 1.3.1 What is *community development*? (1 x 2) (2)
- 1.3.2 Why are women important to community development? (2 x 1) (2)
- 1.3.3 According to the extract, why do rural women bear the largest burden of poverty? (2 x 1) (2)
- 1.3.4 (a) The WYRE initiative provides women with (physical / human) capital. (1 x 1) (1)
- (b) How will agricultural training help alleviate poverty in rural communities? (2 x 1) (2)
- 1.3.5 Explain how the WYRE initiative hopes to empower women to become entrepreneurial leaders in agriculture throughout the continent. (3 x 2) (6)



1.4 Refer to the sketch below on globalisation.



[Source: Examiners own source]

- 1.4.1 State ONE factor evident in **A** that enables the sharing of knowledge. (1 x 1) (1)
- 1.4.2 How have modern transportation systems (**B**) promoted globalisation? (1 x 2) (2)
- 1.4.3 Why can consumers benefit from increased globalisation of trade? (2 x 1) (2)
- 1.4.4 Explain how liberalisation of trade (encouraged by globalisation) present challenges for local businesses. (2 x 2) (4)
- 1.4.5 What potential environmental problems are associated with increased globalisation? (3 x 2) (6)



1.5 Refer to the cartoon and extract on development aid.



**FOREIGN AID: IMPACT ON DEVELOPMENT**

Over the decades, billions of dollars have been channelled from wealthier nations to poorer ones in the hope of promoting economic growth, alleviating poverty and enhancing the people’s quality of life.

However, a complex and often disappointing reality emerges: despite these efforts, many developing countries continue to struggle with high levels of poverty. Despite receiving \$36 billion annually in aid, Sub-Saharan Africa remains the poorest region globally.

One of the factors contributing to the limited success of foreign aid is when it comes with conditions. Unfortunately, when all the conditions are considered, the aid may not necessarily benefit the recipient’s population.

Foreign aid undoubtedly plays a crucial role in addressing immediate humanitarian needs and supporting development initiatives in struggling economies. However, the notion that aid alone can lift countries out of poverty, is overly simplistic and often unrealistic.

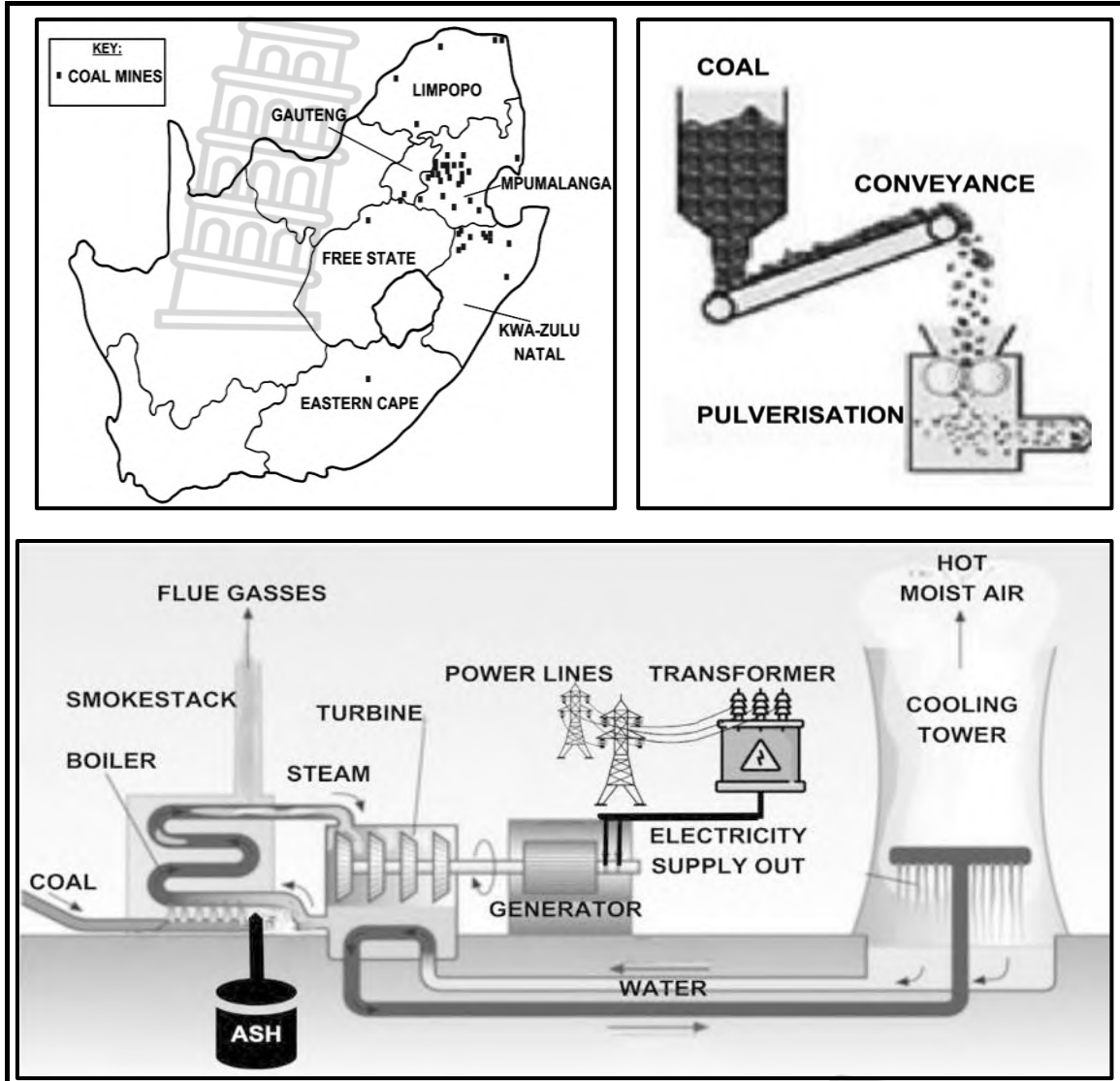
[Adapted from <https://businessday.ng/business-economy/article/foreign-aid/>]

- 1.5.1 According to the extract, what is the purpose of foreign aid? (1 x 1) (1)
- 1.5.2 What factors, as indicated in the cartoon, hinder the success of foreign aid in Africa? (2 x 1) (2)
- 1.5.3 Why does conditional aid not necessarily benefit the recipient country’s population? (2 x 2) (4)
- 1.5.4 In a paragraph of approximately EIGHT lines, explain how technical aid can be beneficial in eradicating poverty. (4 x 2) (8)

**[60]**

**QUESTION 2: RESOURCES AND SUSTAINABILITY**

2.1 The sketches below show a simplified version of thermal power production. Match each description in QUESTIONS 2.1.1 to 2.1.8 with the information from the sketches. Write the answer next to the question numbers (2.1.1 to 2.1.8) in the ANSWER BOOK, for example 2.1.9 coal mines.



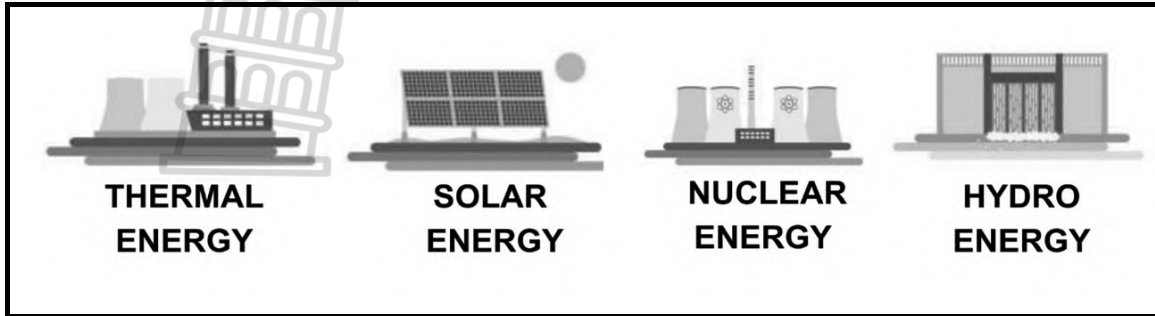
[Adapted from <https://www.electricaltechnology.org/>]

- 2.1.1 The South African province with the largest concentration of coal mines.
- 2.1.2 The process of grinding coal into a fine powder.
- 2.1.3 The heat needed for producing the steam comes from the burning of which fuel?
- 2.1.4 The solid waste produced by the power station that accumulates at the bottom of the furnace.
- 2.1.5 The machine which turns mechanical energy into electrical energy.
- 2.1.6 What is handled and dispersed of by the smokestack?

2.1.7 Heat removed from the steam is dissipated through which component of the power plant?

2.1.8 To adjust the voltage for long-distance travel, to what is generated electricity sent? (8 x 1) (8)

2.2 The images below show different ways that electrical energy is obtained in South Africa. Match the descriptions below with the appropriate energy source. Write only the energy source next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, for example 2.2.8 Thermal energy.



[Source: Examiner's own sketch]

2.2.1 Produces radioactive waste.

2.2.2 South Africa's primary source of electricity.

2.2.3 The leading renewable energy source in South Africa.

2.2.4 The Gariep Dam is the largest ... facility in South Africa.

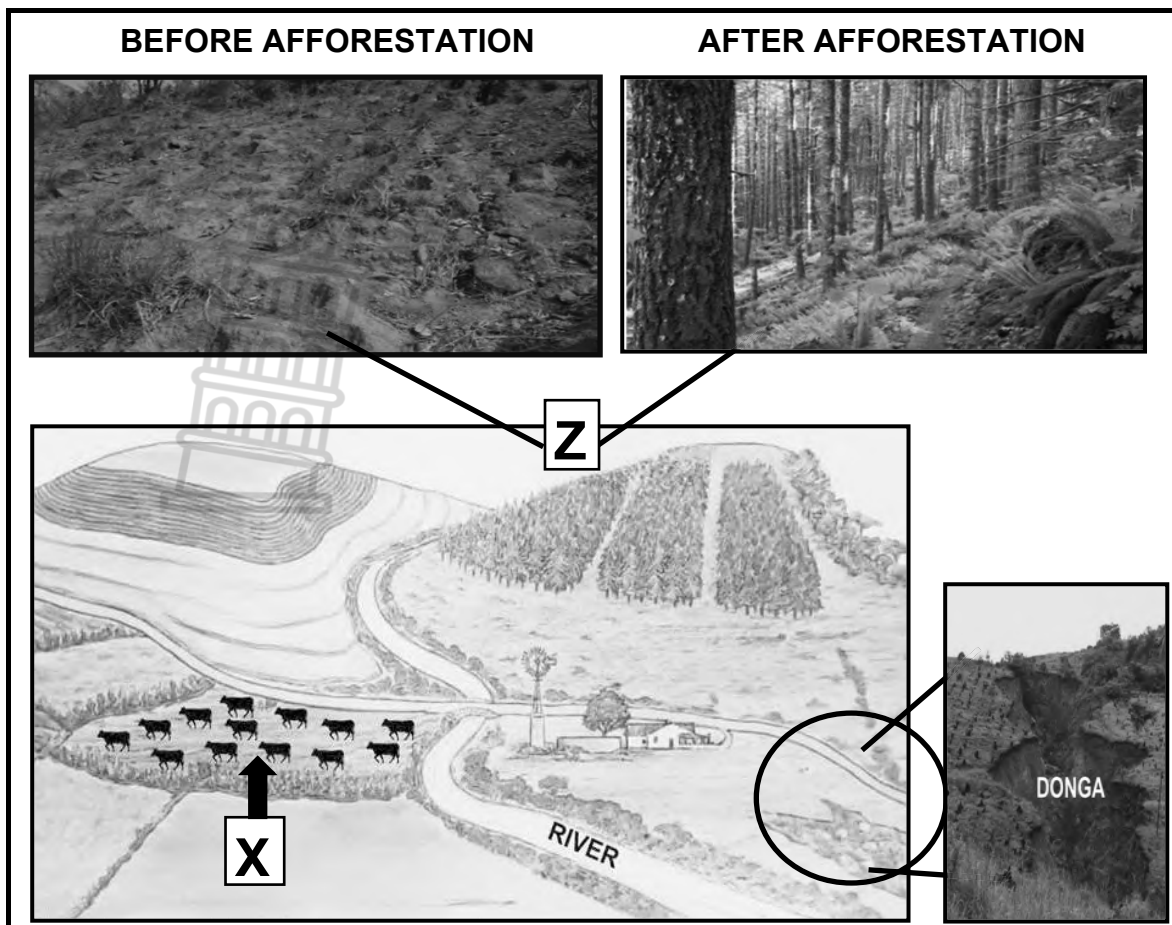
2.2.5 Obtained by splitting uranium atoms.

2.2.6 Requires photovoltaic (PV) installations.

2.2.7 The non-conventional energy source in South Africa. (7 x 1) (7)



2.3 Refer to the sketch and photos on soil erosion.



[Adapted from <https://rethink.earth/farming-with-nature/>]

- 2.3.1 What is *soil erosion*? (1 x 2) (2)
- 2.3.2 From the sketch above, provide evidence of soil erosion. (1 x 1) (1)
- 2.3.3 Why does overgrazing by livestock (**X**) contribute to soil erosion? (2 x 2) (4)
- 2.3.4 What are the negative economic effects of soil erosion? (2 x 2) (4)
- 2.3.5 How does the management strategy implemented at **Z** prevent soil erosion? (2 x 2) (4)

2.4 Refer to the infographic on conventional energy sources in South Africa.

**SOUTH AFRICA'S ELECTRICITY GENERATION BY SOURCE**

Source	Percentage
Coal	86%
Other	9.1%
Nuclear	4.9%

**OVERVIEW OF SOUTH AFRICA'S NUCLEAR POWER (2023)**

Nuclear electricity generation (TWh)	8,2
Reactors operable	2
Reactors under construction	0
Reactors proposed	2
Uranium required (Tons per year)	277
South Africa is the world's eleventh-largest producer of uranium	

[Adapted from <https://world-nuclear.org>]

Nuclear energy has been significant in South Africa's energy landscape for decades with the country's first and only nuclear power plant constructed in 1976 in Duynefontein, near Cape Town. Koeberg NPP, owned and operated by Eskom, has two reactors with a combined capacity of 1 869 MW.

South Africa's focus on nuclear energy (as a low-carbon source of energy) is ever-increasing as the global drive towards mitigating climate change and South Africa's goal of achieving net-zero emissions becomes more pressing.

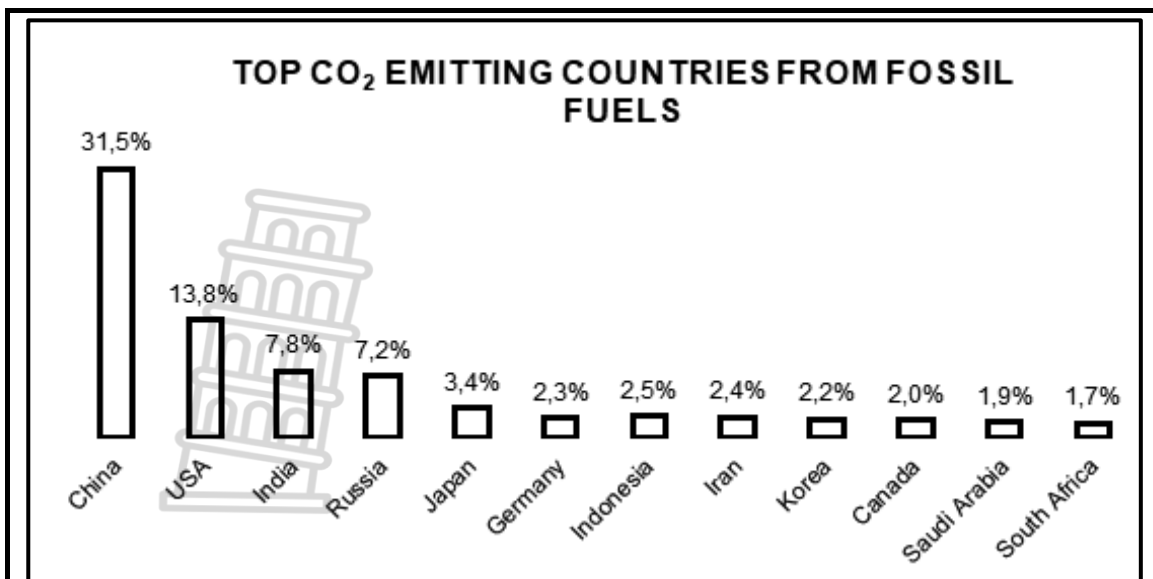
However, despite the potential of nuclear production to help with the country's energy supply and meet climate goals, nuclear energy provides only 4,9% of the electricity supplied to the grid today. In South Africa, there is a historical dependency on coal due to its abundance and the economic importance of the mining industry.

[Adapted from [www.whitecase.com/insight-alert/latest-plans-increase-nuclear-energy-south-africa](http://www.whitecase.com/insight-alert/latest-plans-increase-nuclear-energy-south-africa)]

- 2.4.1 According to the graph, what percentage of South Africa's electricity is nuclear generated? (1 x 1) (1)
- 2.4.2 How does South Africa's uranium production support the proposal for two new nuclear reactors? (1 x 2) (2)
- 2.4.3 Why is nuclear power production an option for the country to achieve net-zero emissions? (2 x 2) (4)
- 2.4.4 In a paragraph of approximately EIGHT lines, explain why South Africa favours coal as its main source of energy despite the advantages associated with nuclear energy. (4 x 2) (8)



2.5 Refer to the graph and extract on energy management in South Africa.



### THE COST OF NON-CONVENTIONAL ENERGY IN SOUTH AFRICA

South Africa is at a critical moment in its energy transition (shift): trying to decarbonise its economy and make sure that everyone has access to reliable and affordable energy. South Africa is a major carbon emitter and there is an urgent need for the country to reduce its greenhouse gas emissions.

While the country has already made progress in integrating renewable energy into its power grid, its path to a sustainable energy future is complicated by financial problems and limited energy storage technology. Renewable energy sources, such as wind and solar are intermittent (erratic) and their output fluctuates. As a result, it is important to set up grid-scale storage which is very expensive.

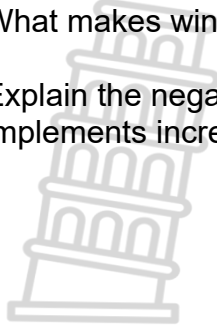
The International Partners Group has agreed to give South Africa \$8,5 billion. The money aims to accelerate (quicken) the decarbonisation of South Africa's economy to help it achieve the goal of reaching net-zero carbon emissions by 2050. However, only 2,7% of the offers are grants, with the other 97% in the form of loans.

[Adapted from [www.mg.co.za/-the-just-energy-transition-in-south-africa/](http://www.mg.co.za/-the-just-energy-transition-in-south-africa/)]

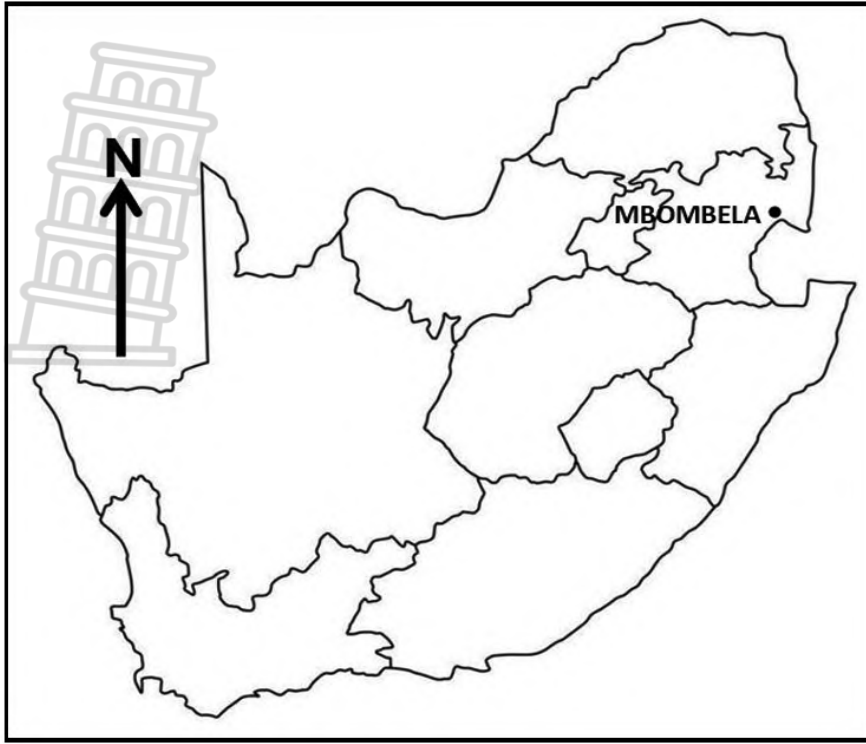
- 2.5.1 What is *non-conventional energy*? (1 x 2) (2)
- 2.5.2 According to the graph, what percentage of global carbon dioxide (CO<sub>2</sub>) from fossil fuels, does South Africa contribute? (1 x 1) (1)

- 2.5.3 Give evidence from the extract that shows that South Africa's energy shift is influenced by:
- (a) A social factor
  - (b) An environmental factor (2 x 1) (2)
- 2.5.4 What makes wind and solar energy sources unreliable? (2 x 2) (4)
- 2.5.5 Explain the negative effects on the South African economy as it implements increased non-conventional energy sources. (3 x 2) (6)
- [60]**

**TOTAL SECTION A: 120**





**SECTION B:****QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES****GENERAL INFORMATION ON MBOMBELA**

Coordinates:  $25^{\circ} 27' 57''$  S;  $30^{\circ} 59' 07''$  E

Mbombela, formerly Nelspruit, is a city in northeastern South Africa. It is the capital of the Mpumalanga province. Located on the Crocodile River, the city lies about 330 km east of Johannesburg.

Fertile soils and the subtropical climate provide perfect conditions for the growing of citrus and tropical fruits, mainly mango, banana, avocado, papaya and macadamia nuts.

The city is a key agricultural processing hub for northeastern South Africa.

[Adapted from [wikipedia.org/wiki/Mbombela](http://wikipedia.org/wiki/Mbombela)]

The following English terms and their translations are shown on the topographic map:

**ENGLISH**

Canal  
Diggings  
Furrow

**AFRIKAANS**

Kanaal  
Uitgrawings  
Voor

3.1 MAP SKILLS AND CALCULATIONS

3.1.1 Johannesburg is in a(n) ... direction from Mbombela.

- A north-easterly
- B south-westerly
- C westerly
- D easterly

(1 x 1) (1)

3.1.2 The scale of the orthophoto map is ... times ... than the scale of the topographical map.

- (i) five
- (ii) ten
- (iii) smaller
- (iv) larger

- A (i) and (iii)
- B (i) and (iv)
- C (ii) and (iii)
- D (iii) and (iv)

(1 x 1) (1)

3.1.3 Complete the grid reference / co-ordinates of the building (**G**) in **E1** on the topographical map. Write down only the information that is not included in the question.

(a) \_\_\_ ° 29' \_\_\_ " S

(2 x 1) (2)

(b) 30° \_\_\_ ' 56" E

(1 x 1) (1)

3.1.4 On the topographical map, calculate the average gradient between trigonometrical station 101 in **B3** and spot height 703 (**A3**).

Use the following information:

HE: 1 250 m

**Formula: Average gradient** =  $\frac{\text{Vertical Interval (VI)}}{\text{Horizontal equivalent (HE)}}$

(3 x 1) (3)

3.1.5 Use the topographical map and the information below to calculate the magnetic declination for 2024.

Difference in years: 10 years  
 Mean annual change: 5' westwards

(2 x 1) (2)

### 3.2 MAP INTERPRETATION

Refer to the topographical map.

3.2.1 The man-made feature **H** in block **B2** is a(n)...

- A mine dump.
- B national road.
- C excavation.
- D embankment. (1 x 1) (1)

3.2.2 The portion of the Crocodile River (**J**) in block **B2** is ... and flows ...

- (i) perennial
- (ii) non-perennial
- (iii) north-westerly.
- (iv) south-easterly.

- A (i) and (iii)
- B (ii) and (iv)
- C (ii) and (iii)
- D (i) and (iv) (1 x 1) (1)

3.2.3 Explain the negative impact that soil erosion, caused by feature **H**, can have on the river (**J**). (2 x 2) (4)

Refer to block **A5** on the topographical map.

3.2.4 Identify the main agricultural activity in the area. (1 x 1) (1)

3.2.5 How has access to water encouraged the agricultural activity (answer to QUESTION 3.2.4)? (1 x 2) (2)

Refer to the orthophoto map.

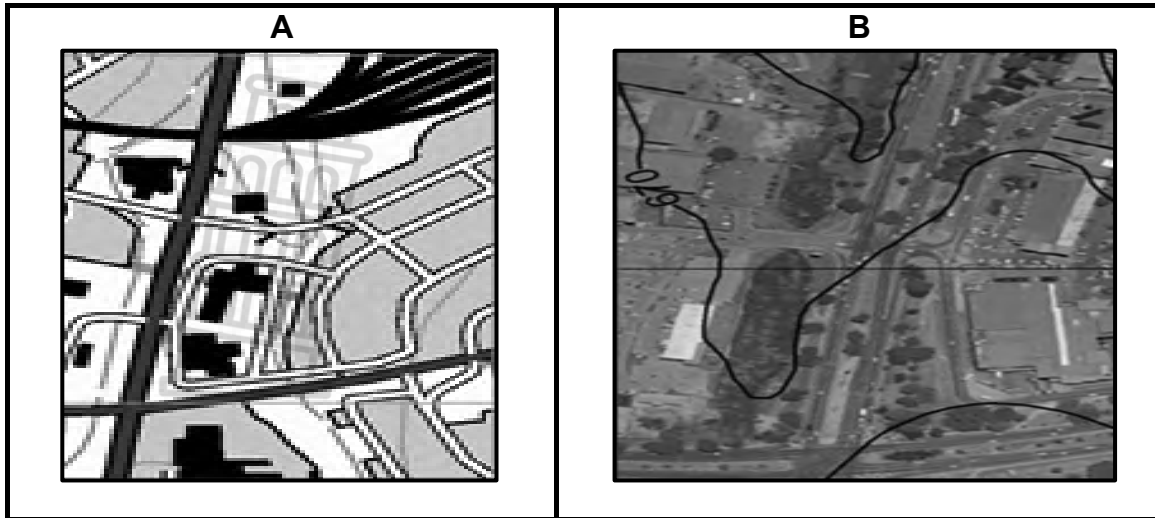
3.2.6 The area marked **X** is dominated by ... activities.

- A manufacturing
- B agricultural
- C mining
- D commercial (1 x 1) (1)

3.2.7 How does unstable electricity access (loadshedding) negatively affect the businesses (answer to QUESTION 3.2.6) in area **X**? (2 x 1) (2)

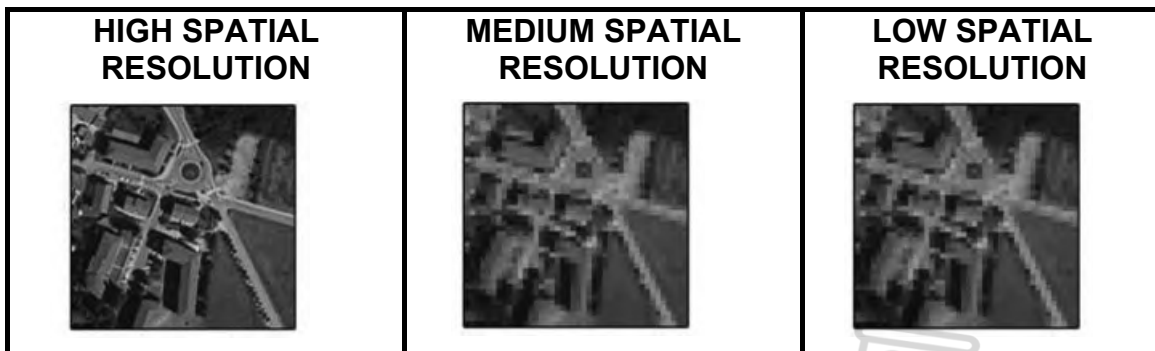
### 3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Refer to **A** which is extracted from block **D4** on the topographical map and **B** which shows a portion of the orthophoto map (**D1/E1**).



- 3.3.1 Which image (**A** or **B**) is vector data? (1 x 1) (1)
- 3.3.2 Identify a natural line feature on **A**. (1 x 1) (1)
- 3.3.3 Why is **B** classified as a vertical aerial photograph? (1 x 1) (1)

Refer to the photographs below to answer QUESTIONS 3.3.4 to 3.3.6.



- 3.3.4 What is *spatial resolution*? (1 x 2) (2)
- 3.3.5 The image with a (high / medium / low) spatial resolution has the highest number of pixels. (1 x 1) (1)
- 3.3.6 How has the size of the pixels influenced the image with a low spatial resolution? (1 x 2) (2)

**TOTAL SECTION B: 30**  
**GRAND TOTAL: 150**



**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 11**

**NOVEMBER 2024**

**GEOGRAPHY P2  
MARKING GUIDELINE**

**MARKS: 150**



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This marking guideline consists of 12 pages.

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**SECTION A:****QUESTION 1**

- 1.1 1.1.1 X (1)
- 1.1.2 X (1)
- 1.1.3 Z (1)
- 1.1.4 Z (1)
- 1.1.5 Z (1)
- 1.1.6 X (1)
- 1.1.7 Z (1)
- 1.1.8 X (1) (8 x 1) (8)
- 1.2 1.2.1 C (1)
- 1.2.2 A (1)
- 1.2.3 C (1)
- 1.2.4 D (1)
- 1.2.5 B (1)
- 1.2.6 C (1)
- 1.2.7 A (1) (7 x 1) (7)
- 1.3 1.3.1 Development for the people by the people (2)  
Collaborative approach where community members, organizations  
and stakeholders work together to identify needs and implement  
development strategies (2)  
**[CONCEPT]** (1 x 2) (2)
- 1.3.2 Promote equality between genders for meaningful development (1)  
Economic contribution to household incomes (1)  
Many families are headed by women (1)  
Primary caregivers / central role in raising children (1)  
Active in health and wellbeing of family (1)  
Bring a diverse perspective (1)  
Involved in various sectors (household, agriculture, entrepreneurship,  
etc.) (1)  
Advocate efforts to address issues (accept examples) (1)  
Promote inclusivity as they have been marginalised (1)  
Important role in managing natural resources (1)  
Women make up most of the informal sector (1)  
Unequal opportunities to education (1)  
**[ANY TWO]** (2 x 1) (2)

- 1.3.3 low literacy / low level of education (1)  
 limited / poor skills training (1)  
 poor access to services (healthcare) (1)  
**[ANY TWO]** (2 x 1) (2)
- 1.3.4 (a) Human (1) (1 x 1) (1)
- (b) Increased agricultural productivity (1)  
 Increased crop yields (1)  
 Diversification of crops and livestock (1)  
 Access to modern technology (1)  
 Contributes to food security / access to food (1)  
 Increases the availability of nutritious / healthy foods (1)  
 Improves quality of life / livelihood (1)  
 Increased employment opportunities (1)  
 Profits from selling agricultural produce (1)  
 Reduces crime (1)  
 Transfer of skills / upskilling (1)  
 Diversified income sources (1)  
 Development of Agribusinesses (1)  
**[ANY TWO]** (2 x 1) (2)
- 1.3.5 Skills development through agricultural training improves productivity and profitability in farming activities (2)  
 Training exposes women to innovative agricultural practices which increases yields and reduces losses. (2)  
 Knowledge of modern methods and tools enable increased production and ability to adapt to change (2)  
 With training, women can better identify and address agricultural challenges (2)  
 Access to finances helps the acquisition of inputs (accept examples) to expand / increase productivity (2)  
 Financial access helps to manage risks and uncertainties by providing a safety net (accept examples) (2)  
 With finances women can explore new markets, diversify products which leads to economic empowerment (2)  
 Training in financial management helps women to understand how a business operates (accept examples) which ensures efficient use of resources (2)  
 Improved cash flow management can lead to increased profitability (2)  
 Business management training provides skills in planning, marketing and sales (2)  
 A solid business plan and marketing strategy helps reach broader markets and attract customers (2)  
 Financial literacy enhances a women's understanding money (accept examples) (2)  
 Informed decisions can be made to build long-term financial stability (2)  
 Technical and business skills make more effective / competitive entrepreneurs (2)



Networking allows women to gain insight / knowledge from industry professionals (accept examples) (2)

Sharing experiences and learning from others can inspire and guide (2)

Networking opens opportunities for forming partnerships and collaborations (2)

Business synergies enable access to new markets and resource sharing (2)

Through networks, women can access markets and resources facilitating business growth and expansion (2)

Collaboration helps women stay informed about market trends and best practices (2)

Empowered women serve as role models and leaders in their communities advocating for gender equality in agriculture (2)

**[ANY THREE]** (3 x 2) (6)

1.4 1.4.1 Internet connection / worldwide web (www) (1)

Digital technology (1)

Communication networks / telecommunications (1)

Social media platforms (1)

Mobile devices (Smartphones and Tablets) (1)

**[ANY ONE]** (1 x 1) (1)

1.4.2 Cheaper costs (2)

Increased access (to markets) (2)

Quicker / time to transport (2)

Support rapid movement across borders (2)

Greater selection of transport modes (2)

Larger quantities can be transported (2)

Modernised / product-specific / technological innovations (2)

Enhanced trade efficiency (2)

Facilitated global labour mobility (2)

**[ANY ONE]** (1 x 2) (2)

1.4.3 Access to a wider range of products (1)

Lower prices (1)

Increased purchasing power improves standard of living (1)

Higher quality products (1)

Gain access to the latest goods / services (1)

Increased availability of specialised goods (1)

Improved customer service (1)

Seasonal and regional products year-round (1)

Greater price transparency (1)

Wider range lifestyle-specific goods (for example: Fair Trade / environmentally-conscious / organic products) (1)

**[ANY TWO]** (2 x 1) (2)

1.4.4 Foreign competitors have advantages (accept examples), making it difficult for local businesses to compete (2)  
 An influx of similar products can saturate local market reducing demand for local goods (2)  
 This oversupply can drive prices down and local businesses lose profits (2)  
 Significant costs for compliance increase operating costs (2).  
 A change in consumer preferences makes it harder for local businesses to maintain traditional market share (2)  
 Consumers might gravitate towards international brands or products, reducing demand for local products (2)  
 Increase pressure for businesses to outsource production to countries with cheap labour impacting local employment (2)  
 Price pressure forces local businesses to lower their prices to stay competitive with international competitors (2)  
**[ANY TWO]** (2 x 2) (4)

1.4.5 Increased carbon emissions (2)  
 Increased gas emissions (2)  
 Deforestation / habitat loss (2)  
 Decline in biodiversity (2)  
 Overexploitation of species / species extinction (2)  
 Disrupted ecosystems (2)  
 Environmental degradation (soil erosion / desertification) (2)  
 Industrial pollution (air, water and soil pollution) (2)  
 Higher levels of waste generation (2)  
 Oceanic pollution affecting marine life / ecosystems (2)  
 Extreme weather events caused by global climate change (2)  
 Spread of invasive species (2)  
 Increased fossil fuel / resource depletion (2)  
 Over extraction of water resources (water scarcity) (2)  
 Destruction of coral reefs (2)  
 Overfishing / disrupted marine ecosystems (2)  
**[ANY THREE]** (3 x 2) (6)

1.5 1.5.1 (Promote) economic growth (1)  
 Alleviate poverty (1)  
 Enhancing people's quality of life (1)  
**[ANY ONE]** (1 x 1) (1)

1.5.2 Theft (1)  
 Waste (1)  
 Dictators (1)  
 Corruption (1)  
 Crime (1)  
 Graft (1)  
**[ANY TWO]** (2 x 1) (2)



- 1.5.3 Economic and political pressure on recipient country (2)  
 A hidden agenda from the donor which may not be beneficial (2)  
 Short-term aid can create a false sense of security (2)  
 Aid may not suit the needs of the recipient country (2)  
 Conditions attached, may not align with actual needs / priorities of locals (2)  
 Unintended consequences (accept examples) (2)  
 Focus can be on immediate results to satisfy donor requirements (2)  
 Long-term development goals and sustainable solutions can be neglected (2)  
 Aid conditioned on specific outcomes may result in inequitable distribution (2)  
 Conditions impose foreign practices / standards conflicting with local cultural practices (2)  
 Political / social tensions can be exacerbated (2)  
 Externally imposed conditions can lead to conflict / undermining social cohesion (2)  
**(ANY TWO)** (2 x 2) (4)
- 1.5.4 Training and education equips people with skills that enhance employability and productivity (2)  
 Development projects create jobs, benefiting the local people and the economy (multiplier effect) (2)  
 Technical aid builds local skills and knowledge empowering communities to solve problems and manage resources (2)  
 Empowered communities are able to be self-reliant and more resilient (2)  
 Increased agricultural production contributes to food security (2)  
 Capacity building through technical aid leads to lasting improvements in economic conditions and poverty reduction (2)  
 Strengthened government and institutional capacity contributes to long-term development (2)  
 Building local expertise and capabilities, technical aid ensures solutions are tailored to specific needs and context of the community (2)  
 More effective and relevant interventions are integrated (2)  
 Encourages the adoption of best practices and innovative approaches which drive development and poverty alleviation (2)  
 By developing local capacities, communities become less reliant on external aid (2)  
 Local stakeholders are engaged and fosters a sense of ownership with sustainable outcomes (2)  
 Focus on creating lasting change which provides a more enduring solution to poverty (2)  
 Provision of expertise and modern technology to upskill the community (2)  
**[ANY FOUR]** (4 x 2) (8)  
**[60]**

**QUESTION 2**

- 2.1 2.1.1 Mpumalanga (1)
- 2.1.2 Pulverisation (1)
- 2.1.3 Coal (1)
- 2.1.4 Ash (1)
- 2.1.5 Generator (1)
- 2.1.6 (flue) gasses (1)
- 2.1.7 Cooling tower (1)
- 2.1.8 Transformer (1) (8 x 1) (8)
  
- 2.2 2.2.1 Nuclear energy (1)
- 2.2.2 Thermal energy (1)
- 2.2.3 Solar Energy (1)
- 2.2.4 Hydro Energy (1)
- 2.2.5 Nuclear energy (1)
- 2.2.6 Solar energy (1)
- 2.2.7 Solar energy (1) (7 x 1) (7)
  
- 2.3 2.3.1 The loss of soil from the ground's surface (by wind and water) (2)  
 The removal of fertile topsoil at a greater rate than it can be formed (2)  
**[CONCEPT]** (1 x 2) (2)
- 2.3.2 Donga (1) (1 x 1) (1)
- 2.3.3 Vegetation is removed / stripped away (2)  
 Reduced ground cover which protects the soil (2)  
 Bare soil is more susceptible to being displaced by wind / water (2)  
 Without sufficient ground cover, raindrops hit the soil directly,  
 dislodging soil particles (2)  
 Soil compaction reduces ability to absorb water, increases surface  
 runoff (2)  
**[ANY TWO]** (2 x 2) (4)

- 2.3.4 Expensive to pay for restoration measures (accept examples) (2)  
 Soil conservation practices (accept examples) are costly (2)  
 Soil remediation increases costs (2)  
 Reduced agricultural productivity (2)  
 Job losses on farms increases poverty (2)  
 Lower crop yields (2)  
 Increased food price (2)  
 Farm lands are abandoned (2)  
 Loss of arable land (2)  
 Higher infrastructure maintenance costs (2)  
 Cost of water treatment because of sedimentation (2)  
 Higher costs for water purification (2)  
 Higher flood risk has damage costs (2)  
 Loss of property value (2)  
 Increased insurance premiums (2)  
 Investment in agriculture and rural development deterred (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.3.5 Vegetation protects soil from heavy rain (2)  
 Ground cover makes soil less vulnerable to rain splash (loosening the soil particles) and runoff (2)  
 Erosion buffer / less exposed soil (2)  
 Reduces wind speed / acts as a wind break (2)  
 More vegetation slows down water movement / reduces erosive capacity of water (2)  
 Less run-off and more infiltration with vegetation cover (2)  
 Soil is stabilised (more roots to bind soil) (2)  
 Soil is more anchored and reinforced by root system (2)  
 More vegetation increases the soil's water holding capacity, decreasing runoff (2)  
 Increased interception of rain by vegetation, reduces surface runoff (2)  
 Decrease in soil compaction / soil is well-aerated (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.4 2.4.1 4,9 (1) % (1 x 1) (1)
- 2.4.2 S.A. is able to support its own nuclear energy infrastructure which relies on uranium fuel to generate electricity (2)  
 By having a domestic source of uranium, S.A. ensures a stable supply for future projects (2)  
 Cost-effect as uranium is produced locally and is not imported (2)  
**[ANY ONE]** (1 x 2) (2)
- 2.4.3 Lower greenhouse gas emissions (2)  
 No coal / fossil fuels are burnt so no carbon dioxide is released (2)  
 Significantly less air pollution levels (2)  
 Smaller physical / minimal land footprint (2)  
 Small amount of uranium produces large amount of energy (2)  
 Reduced fuel for mining and transportation. (2)  
**[ANY TWO]** (2 x 2) (4)

- 2.4.4 Abundant coal reserves make coal readily available and cost-effective energy source (2)
- Existing infrastructure for coal mining, transportation and power generation is already established (2)
- The cost of coal extraction and processing in South Africa is relatively low (2)
- Relying on domestically sourced coal enhances energy security and reduces dependency on imported fuels (2)
- Historical development has created a legacy of coal dependency (2)
- The coal industry supports a significant number of jobs in mining, transportation and power generation (2)
- Majority of S.A.'s power plants are coal-fired and are designed to run on coal (2).
- Transitioning to other energy sources would require substantial investment in new infrastructure and technology (2)
- Large amounts of money have been invested in coal mining and power stations (2)
- Fear of job losses in mining / power plants (2)
- Coal production contributes significantly to South Africa's GDP (2)
- Coal mining towns would suffer economic decline (2)
- Communities and livelihoods tied to the coal industry will be negatively impacted (2)

**[ANY FOUR]** (4 x 2) (8)

- 2.5 2.5.1 Energy sources that are not widely used or are considered alternatives to traditional fossil fuels (2)

**[CONCEPT]** (1 x 2) (2)

- 2.5.2 1,7 (1) % (1 x 1) (1)

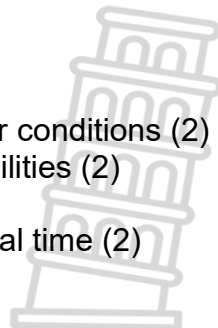
- 2.5.3 (a) Make sure that everyone has access to reliable and affordable energy (1) (1 x 1) (1)

- (b) Trying to decarbonise its economy (1)
- South Africa is a major carbon emitter (1)
- Urgent need for the country to reduce its greenhouse gas emissions (1)

**[ANY ONE]** (1 x 1) (1)

- 2.5.4 Intermittent / irregular depending on weather conditions (2)
- There are geographical and temporal variabilities (2)
- Complex storage technologies (2)
- Difficult to balance supply and demand in real time (2)

**[ANY TWO]** (2 x 2) (4)



- 2.5.5 Loan repayments are very expensive (2)  
Financial constraints to invest in energy storage technology (2)  
The initial costs for setting up renewable energy infrastructure is expensive (2)  
Integrating non-conventional energy sources requires upgrades to the existing grid infrastructure which is costly (2)  
Investments in backup power generation and energy storage to ensure a reliable supply of electricity are required (2)  
Large-scale renewable energy projects require significant amounts of land which needs to be bought (2)  
Ongoing maintenance and updates to keep up with advancements and ensure efficiency is expensive (2)  
The shift away from coal and other fossil fuels can lead to job losses in traditional energy sectors (2)  
Training programs / skill development for the sector is costly (2)  
Importation of material / skills for the transition is a financial burden (2)

**[ANY THREE]**

(3 x 2)

(6)

**[60]**





**SECTION B:**

**QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES**

- 3.1 3.1.1 C (1) (1 x 1) (1)
- 3.1.2 B (1) (1 x 1) (1)
- 3.1.3 (a) 25 (1)° 32 (1)" (Range: 30 – 34) (2 x 1) (2)
- (b) 56 (1)' (1 x 1) (1)
- 3.1.4 754,4 (m) – 703 (m) = 51,4 (1) (m)
- 51,4  
1 250 (1) (for correct substitution)
- = 1: 24,32 (1) (3 x 1) (3)
- 3.1.5 Total change: 50' (1) West  
Magnetic declination 2024:  
18°12' +(1) 50'  
= 19° 02' West of True North (1) (2 x 1) (2)
- 3.2.1 C (1) (1 x 1) (1)
- 3.2.2 D (1) (1 x 1) (1)
- 3.2.3 Eroded soil leads to higher sediment levels sedimentation (2)  
Altered habitats for aquatic life (2)  
Erosion can weaken riverbanks, increasing the risk of collapse (2)  
Reduction in the overall health of the ecosystem (2)  
Pollutants in soil can degrade water quality (2)  
Increased sediment can change the flow dynamics of a river (2)  
Increases the risk of flooding (2)  
Excessive nutrient loading can lead to algal blooms (2)  
Deplete oxygen harming aquatic life (eutrophication) (2)  
**[ANY TWO]** (2 x 2) (4)
- 3.2.4 Orchard / vineyard (1) (1 x 1) (1)
- 3.2.5 Reliable water sources allow for efficient irrigation systems (2)  
Adequate water helps maintain healthy soil (2)  
Mitigates the effects of climate variability, such as droughts (2)  
**[ANY ONE]** (1 x 2) (2)
- 3.2.6 A (1) (1 x 1) (1)

- 3.2.7 Increases operating costs (accept examples) (1)  
 Decreases trading hours (1)  
 Reduced productivity (1)  
 Expensive to supply alternative energy (accept examples) (1)  
 Loss of revenue (1)  
 Decline in profit margins (1)  
**[ANY TWO]** (2 x 1) (2)

### 3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

- 3.3.1 A (1) (1 x 1) (1)
- 3.3.2 (non-perennial) river (1) (1 x 1) (1)
- 3.3.3 Image is taken from directly above the ground (1)  
 Perpendicular / right angle (1)  
**[ANY ONE]** (1 x 1) (1)
- 3.3.4 How clear and easy the detail is to see on a picture (2)  
**[CONCEPT]** (1 x 2) (2)
- 3.3.5 High (1) (1 x 1) (1)
- 3.3.6 The larger the pixels the more reduced the detail, clarity and accuracy (2)  
 Larger pixels reduce clarity by averaging information over an area (2)  
**[ANY ONE]** (1 x 2) (2)  
**[30]**

**TOTAL: 150**

