



# education

Department:  
Education  
North West Provincial Government  
**REPUBLIC OF SOUTH AFRICA**

## PROVINCIAL ASSESSMENT

**GRADE 11**

**GEOGRAPHY P2**

**NOVEMBER 2024**

**MARKS: 150**

**TIME: 3 hours**



**This question paper consists of 15 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 the subsections of questions answered.
5. Start EACH question at the top of a NEW page.
6. Number the answers 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 throughout your calculations, 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 topographic map 3126DD QUEENSTOWN and a 1 : 10 000 orthophoto map 3126DD 1 NOOITGEDACHT are provided.
15. The area demarcated in RED/BLACK on the topographic map represents the area covered by the orthophoto map.
16. Show ALL calculations. Marks will be allocated for steps in calculations.
17. You must hand in the topographic and orthophoto maps to the invigilator at the end of this examination.

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

**QUESTION 1: DEVELOPMENT**

1.1 Choose the word/term from COLUMN B that matches the statement in COLUMN A. Write only **Y** or **Z** next to the question numbers (1.1.1 to 1.1.7) in the ANSWER BOOK e.g. 1.1.8 **Z**.

| COLUMN A  | COLUMN B   |
|---|--|
| 1.1.1 The value of country's exports relative to that of imports.                           | <b>Y</b> Trade balance<br><b>Z</b> Terms of trade              |
| 1.1.2 A Human Development Index of 0,8 indicates a ...                                      | <b>Y</b> Good quality of life<br><b>Z</b> Poor quality of life |
| 1.1.3 Trade that occurs without any restrictions.   | <b>Y</b> Free trade<br><b>Z</b> Trade block                    |
| 1.1.4 An average number of years a person is expected to live.                              | <b>Y</b> Life expectance<br><b>Z</b> Infant mortality rate     |
| 1.1.5 ... approach is often a more successful approach in community-based development.      | <b>Y</b> Top-down<br><b>Z</b> Bottom-up                        |
| 1.1.6 ... when people of all genders have equal rights, responsibilities and opportunities. | <b>Y</b> Gender inequality<br><b>Z</b> Gender equality         |
| 1.1.7 A form of financial assistance paid by government to an industry or economic sector.  | <b>Y</b> Subsidy<br><b>Z</b> Grant                             |

(7 x 1) (7)

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 1.2.8) in the ANSWER BOOK, e.g. 1.2.9 **D**.

1.2.1 ... is a type of tax charged on imported goods.

- A Tariffs
- B Income tax
- C Value Added Tax
- D Dividends Tax

1.2.2 ... is a percentage of the population of a given age group that can read and write.

- A Literacy rate
- B Infant mortality rate
- C Human Development Index
- D GINI-coefficient

2.4 Refer to this extract about the importance of soil erosion in farming economic development.

**World Soil Day**  
 5<sup>th</sup> December 2022

**It's time to go by ground realities, junking the scare mongering !**

The word soil is derived from a Latin word 'solum' meaning earthly material in which plants grow.

In the year 2014, the UN General Assembly decided to observe 5<sup>th</sup> December as World Soil Day - to focus on the importance of healthy soil for agriculture.

Soil is home to over a quarter of all living species on the earth. It ensures food, fodder, fiber and renewable energy supplies to sustain human, animal, and plant life.

A dominant narrative in the public domain is that our agricultural soils remain largely degraded, putting at risk the future of food production.

This is plain scare mongering and not at all supported by empirical evidence.

**Yield growth for a few major crops in the world.**

| Crop  | Year | Yield (Tons/Ha) |
|-------|------|-----------------|
| Wheat | 1961 | 1.1             |
|       | 2020 | 3.5             |
| Rice  | 1961 | 1.9             |
|       | 2020 | 4.6             |

[Adapted from <https://indianagriculturalfacts.com/world-soil-day>]

- 1.2.8 One of the following countries is a member of SADC trade block. (1 x 2) (2)
- 2.4.1 Define the term *soil erosion*. (1 x 1) (1)
- 2.4.2 On which date is World soil day?  
 A South Africa  
 B United States of America  
 C Germany  
 D England (3 x 2) (6)
- 2.4.3 Explain THREE ways in which soil erosion can be prevented. (8 x 1) (8)
- 2.4.4 Explain the importance of healthy soil management for agriculture/farmers in South Africa. (3 x 2) (6)

2.5 Refer to the infographic below on social indicators of development.

**UNJUST ENERGY TRANSITION IN SOUTH AFRICA: AFRICAN YOUTH IN CAPTIVE FOR DECADES**

opportunities, particularly in the burgeoning renewable energy sector, and contribute to economic development. At the same time, indicators of high energy income inequality. To put this into perspective, South Africa has one of the highest GINI-coefficients globally, reflecting significant disparities in income distribution. These are ambitious goals. Yet the urgency of South Africa's energy transition cannot be overstated. As one of the world's largest emitters of greenhouse gases, South Africa faces increasing pressure to curb its carbon footprint. But the transition to clean energy sources must come at the expense of disposable income (after taxes and transfers) of 0.50. GINI-coefficient for market income (before taxes and transfers).

[Adapted from: Ricardo Amansure, Stellenbosch University 8 May 2024]

[Adapted from: stats.sa, July, 2024]

2.5.1 Define the concept energy management. (1 x 2) (2)

2.5.2 Explain what does "Just Energy Transition in South Africa" is all about. (1 x 2) (2)

1.3.2 According to the infographic, what GINI-coefficient score does South Africa have overall? (1 x 1) (1)

2.5.3 Identify ONE renewable energy visible in the extract above. (1 x 1) (1)

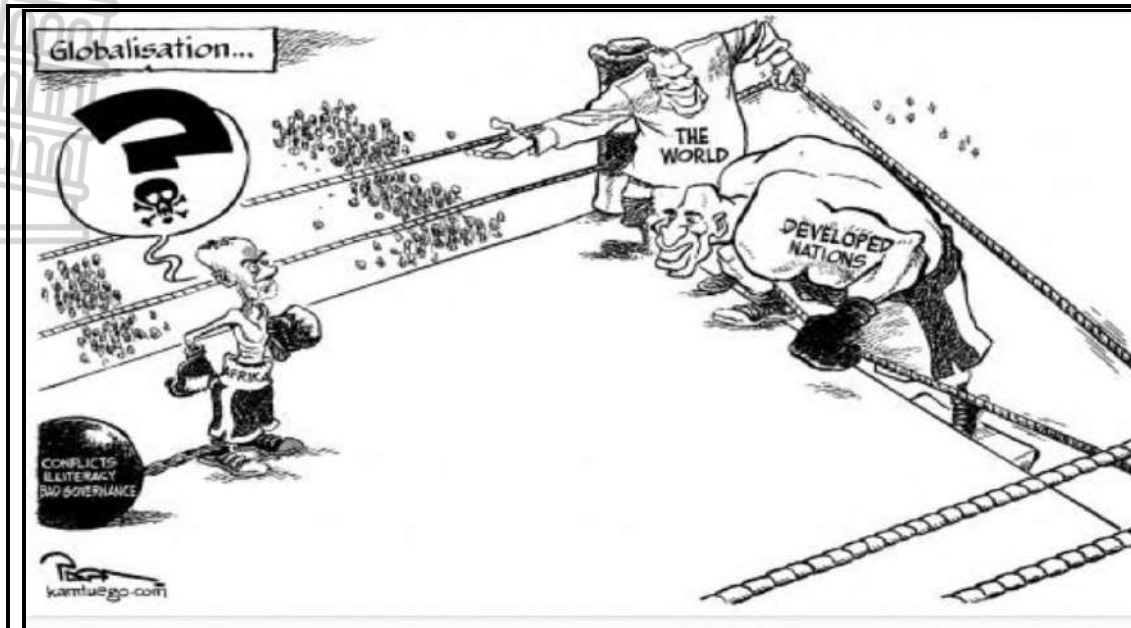
2.5.4 Explain what is meant by "struggle" in the cartoon. (1 x 2) (2)

1.3.4 Explain any TWO causes of inequality in South Africa. (2 x 2) (4)

2.5.5 Explain why reducing country's dependency on coal would have a negative impact on the communities and the economy. (2 x 2) (4)

1.3.5 Recommend any THREE strategies to put in place in order to solve the inequality problems faced by South Africa. (3 x 2) (6)

1.4 Refer to the cartoon below depicting Globalisation.



[Adapted: from [de.toonpool.com](http://de.toonpool.com), 14 November 2008]

- 1.4.1 Define the concept *Globalisation*. (1 x 2) (2)
- 1.4.2 (a) Who benefits the most to globalisation? (1 x 1)
- (b) Substantiate your answer in QUESTION 1.4.2(a). (1 x 2) (3)
- 1.4.3 Evaluate TWO negative impacts that African countries experience due to globalisation. (2 x 2) (4)
- 1.4.4 South African brands such as Loxion Kulca and Bathu, cannot compete with international brands. Recommend any THREE sustainable measures that South African government must put in place in order to assist locally produced goods, to compete internationally. (3 x 2) (6)

1.5 Refer to the cartoon below that shows humanitarian aid.



[Adapted from: [news.cgtn.com](https://news.cgtn.com), 17 November 2021]

- 1.5.1 Define the term *humanitarian aid*. (1 x 2) (2)
- 1.5.2 Does the man offering humanitarian aid represent More Economical Developed Countries (MEDCs) or Less Economically Developed Countries (LEDCs) (1 x 1) (1)
- 1.5.3 Substantiate your answer in QUESTION 1.5.2. (1 x 2) (2)
- 1.5.4 Explain ONE disadvantages of humanitarian aid. (1 x 2) (2)
- 1.5.5 In a paragraph of approximately EIGHT lines, explain why humanitarian aid has more benefits for Less Economical Developed Countries. (4 x 2) (8)
- [60]**

**QUESTION 2: RESOURCES AND SUSTAINABILITY**

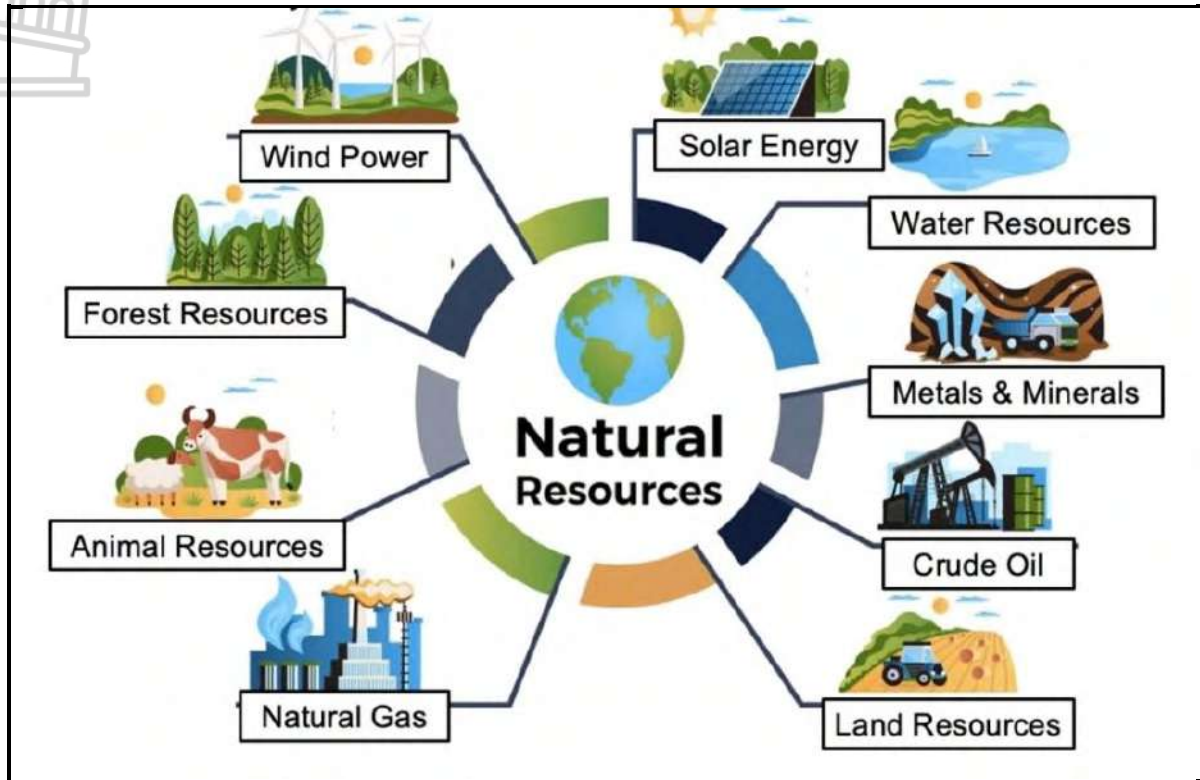
2.1 Choose the word/term from COLUMN B that matches the statement in COLUMN A. Write only **Y** or **Z** next to the question numbers (2.2.1. to 2.2.8) in the answer book. e.g. 2.2.9. **Z**.

| COLUMN A   | COLUMN B   |
|--|--|
| 2.1.1 ... is energy made from the water.   | <b>Y</b> Solar energy<br><b>Z</b> Hydro energy             |
| 2.1.2 ... is the only commercial nuclear power station in South Africa.  | <b>Y</b> Koeberg<br><b>Z</b> Kusile                        |
| 2.1.3 The energy from the heat is ...  | <b>Y</b> wind energy.<br><b>Z</b> thermal energy.          |
| 2.1.4 ... is used as a renewable energy source delivered from organic matter.                                  | <b>Y</b> Biomass<br><b>Z</b> Geothermal                    |
| 2.1.5 ... is a machine that converts kinetic energy into electrical energy.                                    | <b>Y</b> Turbine<br><b>Z</b> Generator                     |
| 2.1.6 ... is meeting today's needs without compromising the ability of future generations to meet their needs. | <b>Y</b> Depletion<br><b>Z</b> Sustainability              |
| 2.1.7 ... is the mineral needed for the generation of nuclear power.   | <b>Y</b> Uranium<br><b>Z</b> Platinum                      |
| 2.1.8 The amount of carbon dioxide emitted into the atmosphere by an individual is referred to as ...          | <b>Y</b> greenhouse footprint<br><b>Z</b> carbon footprint |

(8 x 1) (8)



2.2 Refer to FIGURE 2.2. below to answer the questions that follow. Choose from the words in the figure below that matches the description of the natural resource in QUESTION 2.2.1 to 2.2.7. Write only the natural resource next to the question numbers (2.2.1 to 2.2.7) on the ANSWER BOOK e.g. 2.2.8 Air.



[Adapted from: [Glen.Samaai@westerncape.gov.za](mailto:Glen.Samaai@westerncape.gov.za) ]

- 2.2.1 This is used to make petrol.
- 2.2.2 Hydro electricity is produced from this resource.
- 2.2.3 Responsible for most oxygen on planet earth.
- 2.2.4 Platinum is an example of this resource.
- 2.2.5 Uses radiation from the sun.
- 2.2.6 A fossil fuel composed primarily of methane.
- 2.2.7 Living organisms used for human benefit.



(7 x 1) (7)

2.3 Refer to the extract below on Koeberg Nuclear Power Station as an energy sources.

**KOEBERG NUCLEAR POWER STATION**

Koeberg Nuclear Power Station is a nuclear power station in South Africa and the only one on the African continent. It is located 30 km north of Cape Town. It is owned and operated by the country's state owned electricity public utility, Eskom. Koeberg supplies power to the national grid so that over-capacity can be redistributed to the rest of the country on an as-needed basis. Fuel stock used within the reactor is enriched uranium dioxide pellets containing gadolinium contained in fuel rods. Koeberg is rated at 1 860 MW, its average annual production is 13 668 Gwh and it has two large turbine generators.

[Adapted from: en.m.wikipedia.org]

- 2.3.1 Define the term *uranium*. (1 x 2) (2)
- 2.3.2 Is nuclear an example of conventional or non-conventional energy source? (1 x 1) (1)
- 2.3.3 Substantiate your answer in QUESTION 2.3.2. (1 x 2) (2)
- 2.3.4 Quote statistical evidence from the infographic which shows that Koeberg Nuclear Power Station produces a lot of energy. (2 x 1) (2)
- 2.3.5 In a paragraph of approximately EIGHT lines, explain advantages for economy of a Country that uses nuclear energy. (4 x 2) (8)

**SECTION B**

**QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES**

**GENERAL INFORMATION ABOUT QUEENSTOWN**



Co-ordinates: 31° 54' S; 26° 53' E

Queenstown (officially known as Komani) is a town in the Eastern Cape in South Africa. The town lies on the banks of the Komani river which forms part of the Great Kei river system and have refreshing climate and abundant water supply from the surrounding rugged mountains.

The areas annual average temperature is 18,29°C which is 2,93% lower than the average for South Africa. Queenstown generally receives approximately 90.83 millimetres of precipitation and has 134 rainy days annually. Winters are dry, short, cold, dry and windy: it is mostly clear year around.

[Adapted from : <http://en.wikipedia.org>]

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

**ENGLISH**

- Diggings
- Golf course
- River
- Sewerage works
- Estate
- Salt pan
- Nature reserve

**AFRIKAANS**

- Uitgrawings
- Gholfbaan
- Rivier
- Rioolwerke
- Landgoed
- Soutpan
- Natuurreservaat

3.1. MAP SKILLS AND CALCULATIONS



3.1.1 The contour interval of the orthophoto map is ... metres

- A 5
- B 10
- C 15
- D 20

(1 x 1) (1)

3.1.2 Queenstown is situated in the ... Province.

- A North West
- B Gauteng
- C Eastern Cape
- D Northern Cape

(1 x 1) (1)

3.1.3 Refer to orthophoto map and article below to answer Vertical Exaggeration.

Given: Vertical Scale of a given cross section  
is 1 cm represent 30 m.

Formula : **Vertical Exaggeration (VE) =  $\frac{\text{Vertical Scale (VS)}}{\text{Horizontal Scale (HS)}}$**

Calculate vertical Exaggeration following the given steps.

- a) Vertical Scale (2)
- b) Horizontal Scale (1)
- c) Vertical Exaggeration (2)

(5 x 1) (5)

3.1.4 Define the term *intervisibility*.

(1 x 2) (2)

3.1.5 Refer to topographical map.

Is there any intervisibility between perennial water labelled **J** in block **A3**  
and erosion labelled **I** in block **A2**?

(1 x 1) (1)



3.2 **MAP INTERPRETATION**



3.2.1 Soil erosion is taking place in block **B2**, explain what is the cause of the soil erosion in this area. (1 x 2) (2)

3.2.2 Refer to area labelled **G** in block **B1** on the topographical map.

Evaluate any TWO negative impacts soil erosion have on the physical and human environment in this area. (2 x 2) (4)

3.2.3 Why is the area labelled **G** in block **B1** on the topographical map an ideal place for cultivation? (2 x 2) (4)

3.2.4 Identify TWO ways in which height is shown in block **B2** and **C2** on the topographical map. (2 x 1) (2)

3.3 **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

3.3.1 Define the term remote *sensing*. (1 x 2) (2)

3.3.2 Explain how can remote sensing help to minimize impact of soil erosion in block **C1** on the topographical map. (2 x 2) (4)

3.3.3 Identify any TWO line features found in block **E1** on a topographical map. (2 x 1) (2)

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





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## PROVINCIAL ASSESSMENT

**GRADE 11**

**GEOGRAPHY P2**

**MARKING GUIDELINES**

**NOVEMBER 2024**

**MARKS: 150**



**This marking guidelines consists of 8 pages.**

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

**QUESTION 1: DEVELOPMENT**

- 1.1 1.1.1 Z
- 1.1 1.1.2 Y
- 1.1 1.1.3 Y
- 1.1 1.1.4 Y
- 1.1 1.1.5 Z
- 1.1 1.1.6 Z
- 1.1 1.1.7 Y (7 x 1) (7)

- 1.2 1.2.1 A
- 1.2 1.2.2 A
- 1.2 1.2.3 B
- 1.2 1.2.4 B
- 1.2 1.2.5 A
- 1.2 1.2.6 B
- 1.2 1.2.7 D
- 1.2 1.2.8 A (8 x 1) (8)

1.3 1.3.1 Gini-coefficient is as social indicator that looks at the distribution of wealth. (2)  
**[Concept]**

1.3.2 Gini score is 0,63 (1)

1.3.3 Our challenges, with poverty, inequality and unemployment are far from over. (2) (2)

1.3.4 Unequal access to quality education (2)  
 Tax policies such as regressive taxation can disproportionately burden low income earners. (2)  
 Unequal access to resources. (2)  
 Legacy of colonialism, slavery and past injustices can continue to impact marginalized communities. (2)  
 Unequal representations in policy making and biasness in officials and corruption. (2) (4)  
**[ANY TWO]**

1.3.5 Enhancing access to quality education and vocational training can empower individuals to acquire skills necessary for higher paying jobs. (2)  
 Implementing a progressive tax system can help redistribute wealth by imposing higher tax rates for high income earners. (2)  
 Establishing and enforcing a fair minimum wage can provide a baseline income for low income earners (2)  
 Encouraging entrepreneurship and small business development. (2) (6)  
**[ANY THREE]** (3 x 2)

[15]

1.4 1.4.1 Systems linking all countries of the world together/Economic, social,



political and cultural activities of countries across the world are interconnected (2) (2)

**[CONCEPT]**

1.4.2 (a) Developed nations. (1)  
 (b) Multi-National Corporations increase access to new markets, resources and cheap labor. (2)  
 Investors from developed nations diversify their investment opportunities, potentially higher returns. (2)

**[ANY ONE]** (3)

1.4.3 Environmental degradation: Increased trade and consumption can result in environmental harm. (2)  
 Exploitation of cheap labour, globalization can perpetuate sweatshop labour and poor working conditions. (2)  
 Loss of local industries: Global competition can lead to the decline of local businesses and industries. (2)  
 Brain drain: Globalization can lead to the emigration of skilled workers from developing countries. (2)

**[ANY TWO]** (4)

1.4.4 Procurement policies should prioritize local purchasing for government contracts and projects.(2)  
 Offer tax breaks or reductions for local businesses and startups. (2)  
 Provide financial support for local entrepreneurs and small businesses. (2)  
 Establish programs that offer resources, mentorship, and infrastructure for local startups. (2)  
 Enact legislation that favors local businesses in government contracting. (2)  
 Public awareness campaigns to promote the importance of shopping locally through public awareness initiatives. (2)  
 Simplify licensing and permitting processes for local businesses. (2)  
 Facilitate access to loans, credit, and investment for local entrepreneurs. (2)  
 Create online platforms that showcase local businesses and products. (2)  
 Foster partnerships between local businesses, organizations, and institutions. (2)  
 Provide training and education programs that support local workforce needs. (2)  
 Invest in local infrastructure that supports business growth and development.(2)  
 Encourage mixed-use development and local business-friendly zoning. (2)  
 Implement local currency initiatives that encourage local spending. (2)  
 Organize events and festivals that promote local businesses and products. (2)

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

- 1.5 1.5.1 Humanitarian aid refers to the assistance provided to the people affected by a crisis. (2) [concept] (2)
- 1.5.2 More Economical Developed Countries (MEDCs) (1) (1)
- 1.5.3 He is the one offering humanitarian aid. (2) (2)
- 1.5.4 Recipient communities may become reliant on external assistance rather than developing their own capacity for self-sufficient. (2)  
 Aid programs may impose external values and practices disregarding local customs and cultural norms. (2)  
 Corruption by officials, where people who needed aid the most may be compromised. (2) (2)

**[ANY ONE]**

- 1.5.5 Humanitarian aid helps address hunger and malnutrition by providing food, cash vouchers, or support for agricultural production. (2)  
  
 Humanitarian aid and support help combat diseases, improve healthcare systems, and enhance access to healthcare services. (2)  
  
 It helps rebuild or provide temporary shelter, repair critical infrastructure, and restore basic services like water and sanitation. (2)  
  
 Humanitarian aid can help stimulate local economies by providing cash assistance, supporting livelihoods, and promoting economic recovery. (2)  
  
 Aid helps protect vulnerable populations, such as women, children, and refugees, from exploitation and abuse. (2)  
  
 Humanitarian aid can strengthen local capacities and resilience by providing training, technical assistance, and support for disaster preparedness. (2)  
  
 Humanitarian aid can contribute to peacebuilding efforts by addressing root causes of conflicts, supporting reconciliation, and fostering social cohesion. (2) (8)

**[ANY FOUR]**

**[60]**

## QUESTION 2 RESOURCES AND SUSTAINABILITY

- 2.1 2.1.1 Z  
2.1.2 Y  
2.1.3 Z  
2.1.4 Z  
2.1.5 Z  
2.1.6 Z  
2.1.7 Y  
2.1.8 Z
- (8 x 1) (8)
- 2.2 2.2.1 Crude oil  
2.2.2 Water resources  
2.2.3 Forest resources  
2.2.4 Metals & Minerals  
2.2.5 Solar energy  
2.2.6 Natural Gas  
2.2.7 Animal resources
- (7 x 1) (7)
- 2.3 2.3.1 A dense grey radioactive metal used as a fuel in nuclear. (2)
- 2.3.2 Conventional (1) (1)
- 2.3.3 This energy source is reliant on non-renewable resources (2) (2)
- 2.3.4 Koeberg is rated at 1 860 MW (1)  
Its average annual production is 13 668 Gwh (1) (2)
- 2.3.5 Lower long-term maintenance costs at the plant (2)  
Fewer costly clean-up operations because of less pollution during energy generation (2)  
Nuclear power's output is much higher, therefore less energy needed than other energy sources (2)  
Maintenance of the plant creates sustainable employment opportunities.(2)  
Nuclear power plants create employment opportunities. (2)  
Nuclear energy provides stable long term electricity prices. (2)  
Nuclear energy can boost local economy through infrastructural development. (2) (8)

- 2.4 2.4.1 The loss or removal of fertile topsoil at greater rate than it can form again (2)  
**[CONCEPT]**
- 2.4.2 5<sup>th</sup> December. (1)
- 2.4.3 Plant more trees in order to keep soil intact. (2)  
Rotate crops to improve soil structure, organic matter and moisture. (2)  
Create gentle slopping plots to reduce run-off and soil loss. (2)  
Plant windbreaks to reduce wind speed, soil drying and erosion. (2)  
Managed watersheds to reduce surface runoff. (2)  
Public awareness campaigns to caution the people about soil erosion. (2)  
**[ANY THREE]** (3 x 2) (6)
- 2.4.4 Healthy soil management prevents soil erosion; therefore, soil stays fertile for longer (2) Healthy soil biota (*living organisms present in a particular ecosystem or environment*) facilitates efficient nutrient uptake and recycling. (2)  
Healthy soil management ensures agricultural productivity and ecosystem resilience. (2) Healthy soil filters and retains pollutants, protecting water resources. (2) Healthy soil biota helps suppress soil borne pathogens. (2)  
Well managed soils absorb and retains water, reducing runoff and minimising irrigation needs. (2)  
**[ANY THREE]** (3 x 2) (6)
- 2.5 2.5.1 Energy management refers to the process of monitoring, controlling and optimising energy use. (2) **[CONCEPT]**
- 2.5.2 Just Energy Transition is all about guiding the country away from reliance on coal fired power towards renewable energy alternatives by 2027. (2)
- 2.5.3 Wind energy (1)  
Solar energy (1)  
**[ANY ONE]**
- 2.5.4 The energy transition must also create new employment opportunities. (2)  
It must set up an energy future where power is reliable and not disrupted. (2)  
Cleaner energy sources must not come at the expense of marginalised communities or make socio-economic inequality worse. (2)  
**[ANY THREE]** (3 x 2) (4)



2.5.5 It would cause unemployment of people employed in the mining industry as the demand of coal decreases (2)

Coal mining towns would suffer a decline in their economy and cause a decrease in population numbers (2)

Businesses will suffer because of a reduction in power output (2)

Reskilling and training of workers have financial implications (2)

**[ANY TWO]**

(2 x 2) (4)

**SECTION A: 120**

**SECTION B**

3.1 3.1.1 B (1) (1)  
 3.1.2 C (1) (1)

3.1.3 a)  $VS = 30m \times 100 (1) = 3000cm = 1: 3000 (1)$

b)  $HS = 1: 10\ 000 (1)$

c)  $VE = \frac{1: 3000}{1: 10\ 000} (1)$

$$= \frac{1}{3000} \div \frac{1}{10\ 000}$$

$$= \frac{1}{3000} \times \frac{10\ 000}{1}$$

$$= \frac{10\ 000}{3000}$$

$$= 3.33 \text{ times } (1)$$

(5 x 1)

3.1.4 Intervisibility refers to the ability to see from one point to another point. (2) (2)

3.1.5 No (1) (1)

**[10]**



3.2 3.2.1 Incorrect farming methods are causing soil erosion in this area. (2) (2)



3.2.2 There will be food insecurity due to loss of crops. (2)  
 Loss of infrastructure due to landslides (mass movement) (2)  
 The flooding will also increase. (2)  
 Decrease in economy due to less production. (2) (4)

**[ANY TWO]**

3.2.3 Land is flat/gentle slope which makes easy to cultivate. (2)  
 There is water nearby for irrigation. (2)  
 There is a road near the area, for easy transportation. (2)  
 There is row of trees which act as wind break, protecting crops from strong winds. (2) (4)

**[ANY TWO]**

3.2.3 Spot heights (1)  
 Contour lines (1)  
 Trigonometrical Station (1)  
**[ANY TWO]** (2)

[12]

3.3 3.3.1 Remote sensing refers to the capturing of data on objects from a distance without physical contact. (2) (2)

3.3.2 Soil erosion can be monitored over time and management strategies be implemented. (2)  
 Public awareness/education can on taking care of the landscapes.  
 Farmers can be trained on good farming methods. (2) (4)

**[ANY TWO]**

3.3.3 Track and hiking trail (1)  
 Roads (1)  
 Rivers (1)  
**[ANY TWO]** (2)



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