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.	**Y** **Z**	Trade balance Terms of trade
1.1.2	A Human Development Index of 0,8 indicates a …	**Y** **Z**	Good quality of life Poor quality of life
1.1.3	Trade that occurs without any restrictions.	**Y** **Z**	Free trade Trade block
1.1.4	An average number of years a person is expected to live.	**Y** **Z**	Life expectance Infant mortality rate
1.1.5	… approach is often a more successful approach in community-based development.	**Y** **Z**	Top-down Bottom-up
1.1.6	… when people of all genders have equal rights, responsibilities and opportunities.	**Y** **Z**	Gender inequality Gender equality
1.1.7	A form of financial assistance paid by government to an industry or economic sector.	**Y** **Z**	Subsidy 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 the extract below on the impacts of soil erosion on farming.

1.2.3 ... is a statistical tool used to assess a country's social and economic development.


5th December 2022
World Soil Day
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 5th 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.
Wheat
1.1 Tons/Ha
1961
3.5 Tons/Ha
2020
Rice
1.9 Tons/Ha
1961
4.6 Tons/Ha
2020

D easily spread of diseases.

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

1.2.8 One of the following countries is a member of SADC trade block.

A South Africa
B United States of America
C Germany
D England (8 x 1) (8)

2.4.1 Define the term *soil erosion*. (1 x 2) (2)

2.4.2 On which date is World soil day? (1 x 1) (1)

2.4.3 Explain THREE ways in which soil erosion can be prevented. (3 x 2) (6)

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.

UNEQUAL ENERGY TRANSITION IN SOUTH AFRICA

JUST ENERGY TRANSITION IN SOUTH AFRICA

EMPLOYMENT, POVERTY AND INEQUALITY HAUNTED SOUTH AFRICAN YOUTH IN CAPTIVE FOR DECADES

opportunities, particularly in the burgeoning renewable energy sector, and contribute to economic development. At the same time, it must set up an energy future where power is reliable and not disrupted.

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 cleaner energy sources must not come at the expense of disposable income (after taxes and transfers) or market income (before taxes and transfers).

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

In South Africa, the GINI-coefficient is around 0,63, indicating a high level of income inequality. To put this into perspective, South Africa has one of the highest GINI-coefficients globally, reflecting significant disparities in income distribution. The country's history of apartheid and socioeconomic factors have contributed to this inequality. Here's a rough breakdown of the GINI-coefficient in South Africa: Overall GINI-coefficient: 0,63; GINI-coefficient for disposable income (after taxes and transfers): 0,58; GINI-coefficient for market income (before taxes and transfers): 0,68.

[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)

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

2.5.4 What does "Just Energy Transition in South Africa" aims to achieve? (3 x 2) (6)

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

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

[60]

1.3.1 Define the term *GINI-coefficient.* (1 x 2) (2)

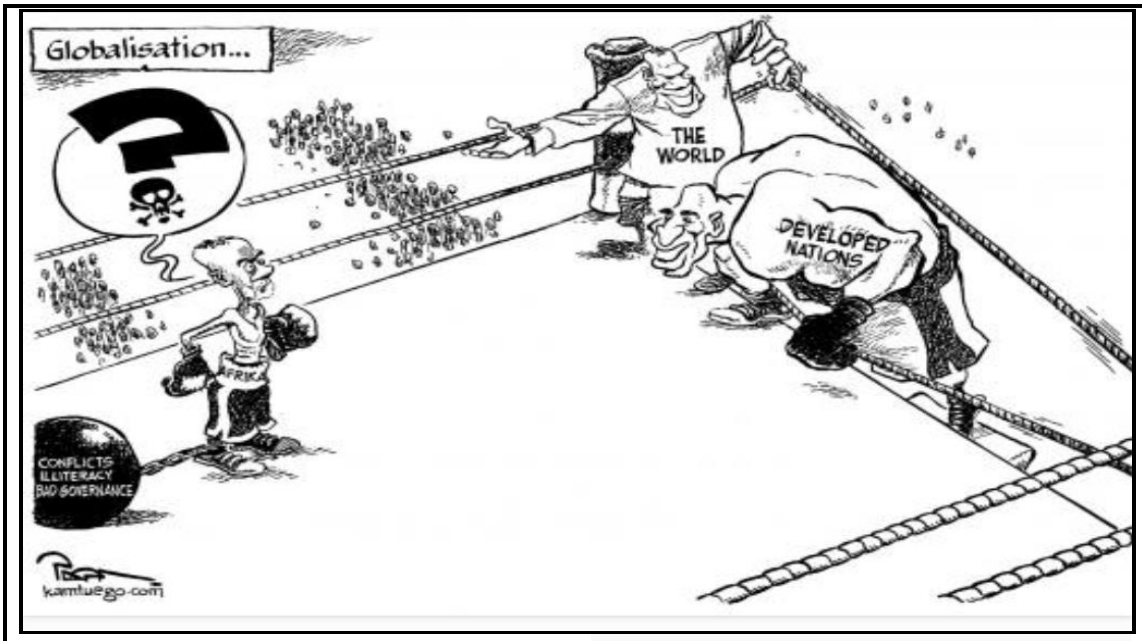
1.3.2 According to the infographic, what GINI-coefficient score does South Africa have overall? (1 x 2) (2)

1.3.3 Explain what is meant by "Our struggle is still on" on the cartoon. (1 x 2) (2)

1.3.4 Explain any TWO causes of inequality in South Africa. (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*,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 ,17 November 2021]

1.5.1 Define the term *humanitarian aid.* (1 x 2) (2)

1.5.2 Does the man offering humanitarian aid representing 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]

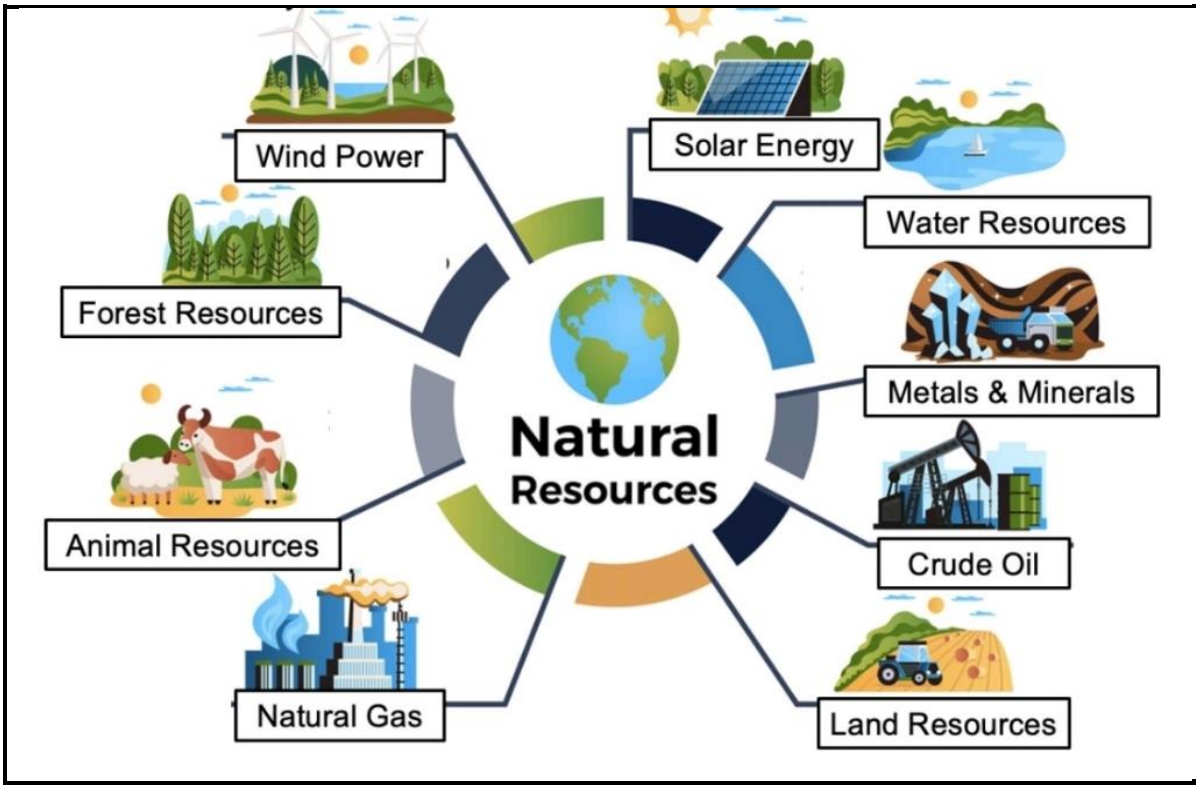
QUESTION 2: RESOURCES AND SUSTAINABILITY

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

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 redistribited 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 QEENSTOWN

Co-ordinates: 31º 54' S; 26º 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 18,29ºC 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	AFRIKAANS
Diggings	Uitgrawings
Golf course	Gholfbaan
River	Rivier
Sewerage works	Rioolwerke
Estate	Landgoed
Salt pan	Soutpan
Nature reserve	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) =** $\frac{\textbf{Vertical Scale (VS)}}{\textbf{Horizontal Scale (HS)}}$

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