education

MPUMALANGA PROVINCE

REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

Stanmorephysics.com

GEOGRAPHY P2

SEPTEMBER 2025

Stanmorephysics.com

MARKS: 150

TIME: 3hours

This question paper consists of 15 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO sections.

   SECTION A
   QUESTION 1: RURAL AND URBAN SETTLEMENTS (60)
   QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA (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 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 in your final answer, e.g. 1020 hPa, 22°C and 25m.

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. 1: 50 000 topographical map 2527 CA RUSTENBURG (WEST) and a 1: 10 000 orthophoto map 2527CA_20 RUSTENBURG are provided.

15. The area demarcated in RED/BLACK on the topographical 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 topographical and orthophoto map to the invigilator at the end of this examination.

Copyright reserved

SECTION A: RURAL AND URBAN SETTLEMENTS AND THE ECONOMIC GEOGRAPHY OF SOUTH AFRICA

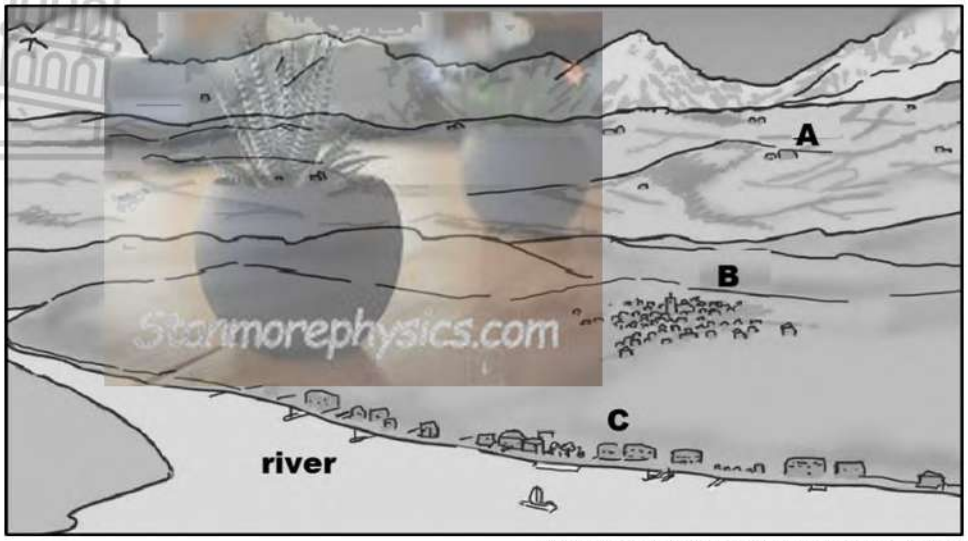
QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 Choose a term/concept in COLUMN B that matches the statement in COLUMN A. Write only the letter **Y** or **Z** next to the question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, e.g. 1.1.9 Y.

COLUMN A	COLUMN B
1.1.1 The function of an urban settlement.	**Y** multifunctional **Z** unifunctional
1.1.2 The smallest urban settlement in the urban hierarchy.	**Y** city **Z** town
1.1.3 The location of a settlement in relation to it's surroundings.	**Y** site **Z** situation
1.1.4 The process the community undergoes to claim back land that is rightfully theirs.	**Y** land redistribution **Z** land restitution
1.1.5 Focuses on food security in local communities.	**Y** commercial farming **Z** subsistence farming
1.1.6 The purpose of a sugar mill on a commercial farm, is mainly to ……. the sugar cane.	**Y** processes **Z** market
1.1.7 Settlement away from a generally wet area.	**Y** wet point **Z** dry point
1.1.8 The small rural settlement is made up of a cluster of homes.	**Y** village **Z** town

(8 x 1) (8)

1.2 Refer to the sketch on settlement shapes and patterns and write the correct letter that represents the settlement that matches the descriptions in statements 1.2.1. to 1.2.7. Write only the letter that represents the correct answer in the ANSWER BOOK, e.g. 1.2.8. A.



[Source: Adapted from google images]

1.2.1 Settlement can be classified as nucleated.

1.2.2 Settlement has safety advantage.

1.2.3 Settlement is an isolated farmstead.

1.2.4 Settlement has a linear shape.

1.2.5 The shape of settlement is influenced by the river.

1.2.6 Farmers in settlement plant a single crop.

1.2.7 Mechanization is possible for farmers in this settlement. (7 x 1) (7)

Stanmorephysics.com

1.3 Refer to the case study below showing social injustice issues associated with rural settlements in South Africa.



The Mncwasa dam in Amathole, Eastern Cape, is full of fresh water. But taps remain dry in most of the 40 villages that are supposed to receive water from the dam. "Every day I wake up at 4am to collect water before the cows and pigs get a chance to drink from the stream," says 80-year-old Nonambala Ngxongonya. She and several other elderly women pointed out the murky stream where they collect water to cook and clean. The communal taps where residents can access water had intermittent supply. 33% of the taps that were not working were said to be broken. The survey found a large number of overflowing wasting reservoirs and leaking break pressure tanks, which feed water to the taps.

[Source: https://groundup.org.za]

1.3.1 Identify the social injustice in the case study. (1 x 1) (1)

1.3.2 Name TWO reasons why people staying in Amathole don't have access to tap water. (2 x 2) (4)

1.3.3 Discuss THREE challenges faced by rural communities because of rural-urban migration. (3 x 2) (6)

1.3.4 Suggest TWO strategies to improve rural settlements. (2 x 2) (4)

Stanmorephysics.com

1.4 Refer to the extract of a residential area.



Camps Bay is the premier tourist destination in Cape Town, South Africa, and is magnificently located on the Atlantic Ocean, at the foot of the Twelve Apostles mountain range and adjacent to Table Mountain.

Camps Bay is a suburb of Cape Town, with a village feel, offering a convenient location only 15 minutes' drive to the city centre, 20 minutes from the V&A Waterfront, 30 minutes from the airport, 40 minutes from the Cape Winelands and 60 minutes from Cape Point. You can safely walk to the Camps Bay beachfront during the day and at night.

[Source: PROPERTY-3-CAMPS-BAY-R32M-1-744x439.jpg]
[Source: https://www.campsbayinfo.com/]

1.4.1 Identify the type of residential zone. (1 x 1) (1)

1.4.2 Give a reason for your answer to QUESTION 1.4.1. (1 x 2) (2)

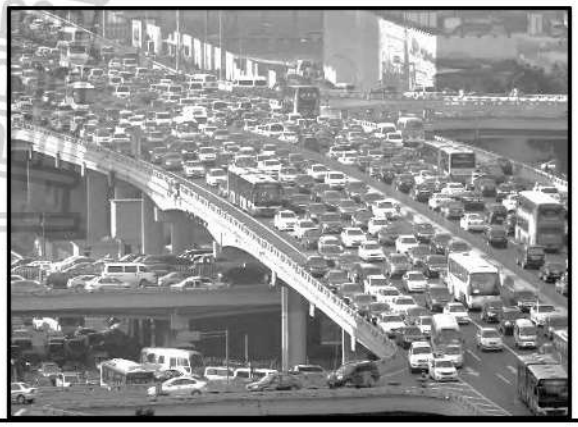
1.4.3 Suggest TWO physical factors that influenced the location of the residential area. (2 x 2) (4)

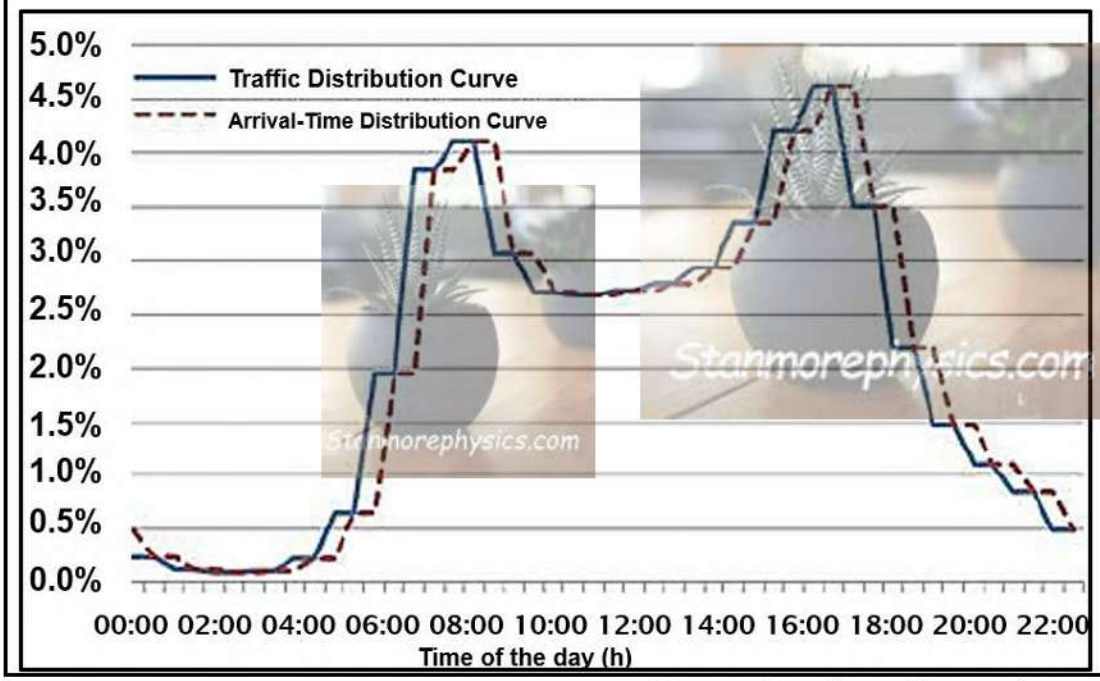
1.4.4 What factors are responsible for the existence of high income and low income residential areas. (2 x 2) (4)

1.4.5 Differentiate between this residential area and a low income residential area. (2 x 2) (4)

Stanmorephysics.com

1.5 Refer to the following photograph and a graph on an urban issue.





[Source: https://www.bing.com/images]

1.5.1 Identify the urban issue. (1 x 1) (1)

1.5.2 Account for high traffic at 08:00 and at 17:00. (1 x 2) (2)

1.5.3 What is the trend shown by the graph with regards to the travel time on the peak hours? (1 x 2) (2)

1.5.4 Describe the negative effect this trend may have on the commuters. (2 x 2) (4)

1.5.5 Suggest THREE possible strategies in which the urban issue in the photo can be reduced. (3 x 2) (6)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 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 (2.1.1 to 2.1.7) in the ANSWER BOOK e.g. 2.1.8 B.

2.1.1 Physical (natural) factors favouring agriculture in South Africa are:

(i) Poor quality soils
(ii) Low rainfall
(iii) High temperatures
(iv) Seasonal climatic variations

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

2.1.2 South Africa imports this raw material.

A Maize
B Wheat
C Sugar
D Meat



2.1.3 …is an economic factor affecting mining.

A Mine injuries
B HIV/AIDS
C Fluctuating prices
D Geothermal gradient

2.1.4 Industries located on the outskirts.

A Light industry
B Heavy industry
C Market Oriented industry
D Footloose industry

2.1.5 Industries that provide services that are available 24 hours 7 days a week.

A Ubiquitous
B Footloose
C Raw material
D Break of bulk point

2.1.6 It is an example of a value added product.

A Maize
B Fruit
C Fruit juice
D Meat

2.1.7 These are challenges facing gold mining.

(i) Variety of minerals
(ii) Disputes between union and mine owners
(iii) Water availability
(iv) Exporting unprocessed goods

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

2.1.8 The only landlocked (inland) industrial region.

A Durban-Pinetown
B The PWV
C South Western Cape
D Port Elizabeth Uitenhage

(8 x 1) (8)

Stanmorephysics.com

2.2 Choose the correct word(s) from those given in brackets.

2.2.1 Mining is part of the (primary/secondary) sector.

2.2.2 The largest gold reserve in South Africa is in (Mpumalanga/ Gauteng).

2.2.3 The cost of exporting gold from Gauteng via harbours is (high/low).

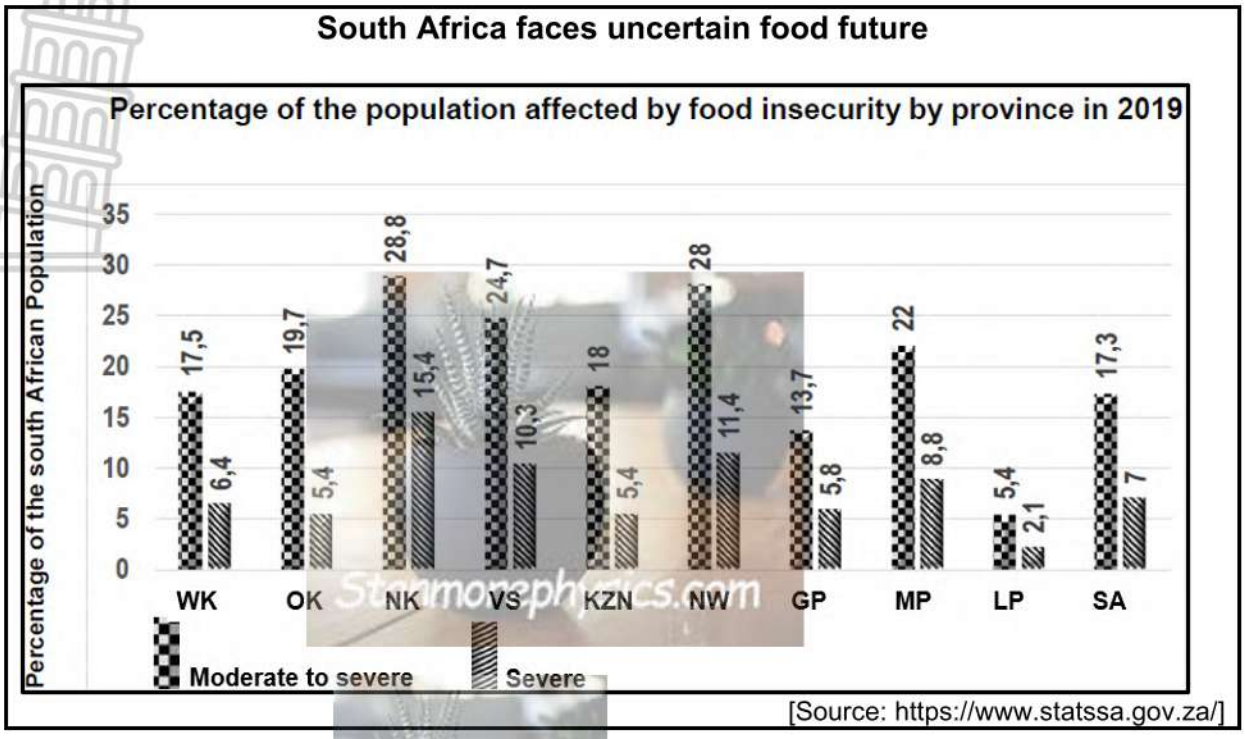
2.2.4 The fact that gold is non-renewable (favour/limit) gold mining.

2.2.5 A social factor limiting gold mining is (labour strikes/ low thermal gradient) in gold mines.

2.2.6 More foreign income is earned in South Africa if gold is exported as a (raw material /processed product).

2.2.7 Mines earn more profit from exports when the price of minerals is (low/high) (7 x 1) (7)

2.3 Refer to the graph on food security.



2.3.1 Define the concept "*food security*". (1 x 2) (2)

2.3.2 Which province was severely affected by food insecurity in 2019? (1)
(1 x 1)

2.3.3 What percentage of the population was moderate to severely affected by food insecurity in Mpumalanga? (1 x 2) (2)

2.3.4 Explain how climate change negatively affects food security. (2 x 2) (4)

2.3.5 Provide THREE strategies to increase food security in South Africa.
(3 x 2) (6)

Stanmorephysics.com

2.4 Refer to the extract on Gauteng (PWV)

SOUTH AFRICA'S ELECTRICITY WOES CONTINUE TO PLACE MANUFACTURING IN THE GAUTENG (PWV) CORE INDUSTRIAL REGION AT RISK

The lack of reliable electricity supply is not only leading to lost production and increased costs across South Africa's shrinking manufacturing sector, but has left enterprises unable to plan, invest and grow.

The region was at a 'tipping point' and at risk of becoming a 'rust belt', with significant plant closures, rising unemployment and crime, as well as low rates of local and foreign investment.

However, the Gauteng (PWV) core industrial region has cemented its status towards being the capital of SA's motor vehicle manufacturing industry by launching its first automotive special economic zone (SEZ).

The automotive vehicle manufacturer Ford Motor Company will see at least R3.6bn in projected investment being pumped into the project. The first phase of the project was set to create almost 7,000 direct jobs.

[Adapted from sowetanlive.co.za/news/south-africa/2019-11-11-gauteng-revs-engine-to-take-over-car-industry/]

Stanmorephysics.com

2.4.1 Mention ONE main industry in Gauteng Industrial region? (1 x 1) (1)

2.4.2 What problems are Gauteng likely to face because of unreliable electricity supply according to the extract? (2 x 1) (2)

2.4.3 State TWO physical (natural) factors that influenced the location of this industrial region. (2 x 2) (4)

2.4.4 In a paragraph of approximately EIGHT lines, explain why the PWV/Gauteng Industrial Region is a preferred destination for Ford Motor Company international investors. (4 x 2) (8)

2.5 Refer to the photo and extract on informal trading.

ROSEBANK ART & CRAFT MARKET



Emily Mahlangu (61). She is from Mpumalanga KwaNdebele. Emily can't read and write and without literacy skills, her job opportunities were scarce.

She started designing her own art using beads in 1981 and was soon exhibiting all over Johannesburg and was even hired to lecture youth on the art of beadwork.

[Source: toyota.co.za/connect/article/rosebank]

2.5.1 According to the photo, name ONE product that Emily is selling at her stall. (1 x 1) (1)

2.5.2 Explain the concept "*Informal sector*" (1 x 2) (2)

2.5.3 According to the extract, why was Emily unable to find a job. (1 x 2) (2)

2.5.4 Describe the characteristics of informal trading visible in the extract and the photo. (2 x 2) (4)

2.5.5 What are the challenges that people, like Emily, face in the informal sector? (2 x 2) (4)

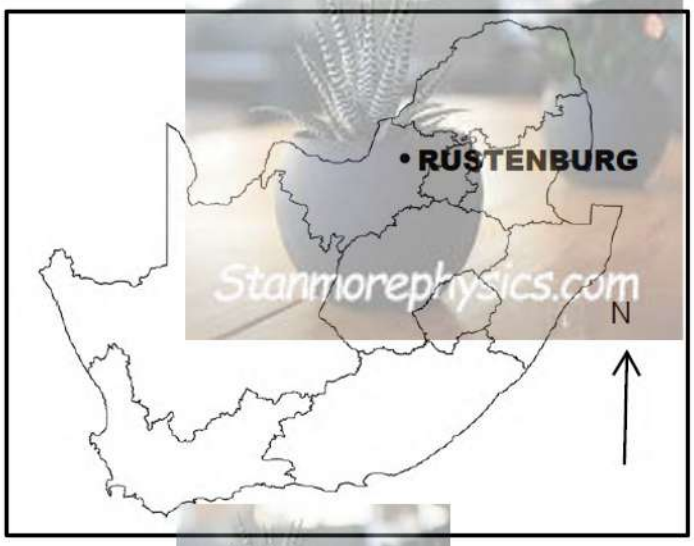
2.5.6 Suggest ONE strategy that could be implemented to improve the informal sector. (1 x 2) (2)

[60]

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON RUSTENBURG



Coordinates: 25°40'3.2" S 27°14.525' E

Rustenburg is a city at the foot of the Magaliesberg mountain range. Rustenburg is the most populous city in North West province, South Africa (549,575 in 2011 and 626,522 in the 2016 census). In 2017, the city's Gross Domestic Product (GDP) reached ZAR 63.8 billion, accounting for 21.1% of the GDP of the North West Province, and 1.28% of the GDP of South Africa.

[Source: https://en.wikipedia.org/]

The following term English terms and their Afrikaans translation are shown on the topographical map

ENGLISH	AFRIKAANS
River	Rivier
Golf course	Gholfbaan
Sewage works	Rioolwerke
Holiday resort	Vakansie -oord
Estate	Landgoed
Show grounds	Skougronde
Parks	Parke
Sport ground	Sportgronde
Dirt bike track	Grondpad fietsbaan
Landing strip	Landingstrook

3.1 MAP SKILLS AND CALCULATIONS

Refer to the topographical map and the orthophoto map. Four options are given to the questions below. Choose the correct answer and write only the letter (A-D) next to the question numbers (3.1.1 – 3.1.2) in the ANSWER BOOK, e.g. 3.1.3A

3.1.1 The contour interval of the topographic map is….

A 10m.
B 20m.
C 5m.
D 20cm. (1 x 1) (1)

3.1.2 The scale of the orthophoto map:

A 1 cm represents 100 m
B 1 cm represents 100 km
C 1 m represents 10 m
D 1cm represents 10 km (1 x 1) (1)

Refer to the block **E1** on the topographical map.

3.1.3 Calculate the actual distance of the power lines in meters.
Formula: **Actual distance = Map distance x Map scale** (2 x 1) (2)

3.1.4 Determine the true bearing from Trigonometrical station 217 in block **D3** to the reservoir in block **E4**. (1 x 2) (2)

3.1.5 Refer to the topographical map. Calculate the magnetic declination of the topographical map for 2025 if the difference in year is 11 years. (3 x 1) (3)

3.1.6 Use the information in Question 3.1.4 and Question 3.1.5 to calculate the Magnetic bearing for the year 2025.
Formula: **Magnetic bearing = True bearing (TB) + Magnetic declination (MD)** (1 x 1) (1)

3.2 MAP INTERPRETATION

Refer to block **A4** on the topographical map.

3.2.1 (a) Identify the dominant street pattern. (1 x 1) (1)

(b) Explain how this street pattern causes an economic disadvantage to the motorists. (1 x 2) (2)

Stanmorephysics.com

Refer to the cemetery in block **A3** on the topographical map.

3.2.2 (a) In which land use zone is the cemetery located? (1 x 1) (1)

(b) Describe the factors that led to the choice of site of the cemetery. (1 x 2) (2)

Refer to Block **A1** on the topographical map.

3.2.3 (a) Identify the type of farming that occurs in block **A1**. (1 x 1) (1)

(b) What is the social role of farming in block **A1** and **A2**? (1 x 2) (2)

Refer to the Holiday Resort in block **B3** and the residential area Geelhoutpark in block **A3**.

3.2.4 (a) In which economic sector does the holiday resort belong? (1 x 1) (1)

(b) What is the importance of the residential area, Geelhoutpark, block **A3**, to the holiday resort in block **B3**? (1 x 2) (2)

3.3 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

Refer to the recreational area in block **B4**.

3.3.1 The recreational area can be classified as a (point/line/polygon) feature. (1 x 1) (1)

3.3.2 Mention ONE layer which was considered when allocating the recreational area in block **B4**? (1 x 1) (1)

3.3.3 What is the importance of data layering? (1 x 2) (2)

Refer to the diggings in block **A2**

3.3.4 Define the term buffering. (1 x 2) (2)

3.3.5 Why is it important to buffer the diggings? (1 x 2) (2)

[30]

TOTAL 150