



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2015

GEOGRAPHY: PAPER I
MARKING GUIDELINES

Time: 3 hours

300 marks

These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.

The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.

SECTION A GEOGRAPHICAL ISSUES**QUESTION 1 GEOGRAPHICAL CASE STUDY: FOCUS ON EMALAHLENI, MPUMALANGA****1.1 Subtropical Anticyclones and Their Impact on the Highveld Climate****1.1.1 The Highveld summer climate:**

Summer rainfall (400 – 900 mm/ annum) average temperatures between 21 °C and 24 °C – it can get very hot at times, some temperatures reaching 38 °C. In order to earn the 2 marks for summer and 2 marks respectively for winter, candidate must make a general reference to rainfall and temperature. (2)

The Highveld winter climate:

Dry winter (very little rainfall during winter months), mist/ fog being common, cold, especially evenings and early mornings with minimum temperatures being as low as -11 °C. (2)

(rainfall and temperature must be referred to in the answer to get a full 4 marks)

1.1.2 (a) Kalahari high pressure/ continental high pressure/extension of the South-Indian HP./ Interior high pressure. (2)

(b) The Kalahari HP system is present over the interior of South Africa in winter due to **cooler winter temperatures** associated with the **subsidence of air**. Due to the cold air there are **few rising convection currents** to lift the descending air from the high pressure system. Subtropical HP cells also move further north in the winter months in the southern hemisphere. Presence of the inversion layer. (4)

1.1.3 (a) Fog and mist are linked to a road traffic report in that they **affect the visibility** on the roads and create **dangerous driving conditions**. **Motorists will slow down** with heavy mist and fog, which may result in **traffic backups and delays**. To prevent accidents. [Any relevant point] (2)

(b) Smog is a kind of air pollution, named for the **mixture of smoke and fog** in the air. Classic smog **results from large amounts of coal burning** in an area and is caused by a mixture of smoke and sulphur dioxide. It is not necessary for candidates to provide an explanation for smog in this response. Presence of hygroscopic nuclei (2)

There are high levels of smog within the Emalahleni area due to the **large numbers of coal-fired power stations and coal mining activities** in the area. In order to get the full 4 marks, candidates must make mention of the specific type of industry eg. Power stations and coal mining. Candidates can also make reference to subsiding air. (2)

(c) During winter the **Kalahari high pressure system is lower down in the atmosphere**. Due to the **subsiding air associated with the HP, pollution remains trapped** contributing to increased frequency of smog during winter mornings. Learners may also comment on the **stable** atmospheric conditions associated with the winter months. The concept of the inversion layer preventing movement of air can also be mentioned. (4)

1.2 Urban Settlement Issues

1.2.1 Main function of Emalahleni is coal mining, ie classified as a mining settlement/ central place/ industrial town/specialized town. Primary as a main function was not accepted. (2)

1.2.2 (a) Urbanisation is the percentage population living in an urban region/ increased proportion of the population living in an urban area. Rural-urban migration was NOT accepted. (2)

(b) People are moving in search of **employment opportunities**, which may be linked to the coal mining and associated industries. Accept multiple answers – could also include: better opportunities, eg education and health care. Poverty in surrounding rural areas. Mechanisation in rural areas and drought, leading to unemployment. (2)

1.2.3 Challenges people living in Vosman and Kwa-Guqa may face include:

- Limited connection to the national grid (electricity supply).
- Inadequate water and sanitation. Problems of waste removal
- Poor housing.
- Overcrowding
- Exposure to very poor air quality due to proximity to power stations – associated with respiratory disorders and illness.

[Any 2 relevant and **distinct points**] (4)

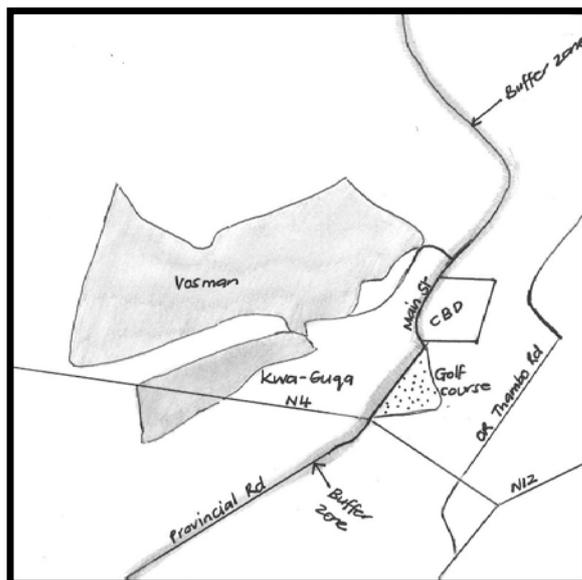
1.2.4 Sketch map of Emalahleni.

2 marks awarded for each clearly indicated form of landuse:

- Major transport routes/ links (N4, N12)
- Residential areas of Kwa-Guqa and Vosman
If national routes not labelled, only 1 mark awarded
If residential areas not labelled by name, only 1 mark awarded
- Buffer zone – provincial road/ main street belt area is the buffer
- Golf course
- CBD (5 × 2 = 10)

Accuracy of sketch (*proportion/ scale and correct positioning of landuse features*) = 2 marks. (2)

Neatness of sketch = 2 marks (2)



1.3 Strategies for Industrial Development

- 1.3.1 A spatial development initiative (SDI) is a strategy developed in South Africa aimed at **promoting investment**, development and growth in regions of the country that **have potential but remain underdeveloped**. Corridor / transport route can be mentioned. (2)
- 1.3.2 Richards Bay (coal terminal).
Matola Coal terminal.
Komatipoort
Witbank/Emalahleni/Johannesburg
These are break-of-bulk points since each area will represent a change in transport. (6)
[2 marks each per break-of-bulk point; 2 marks for reasoning]
- 1.3.3 (a) Primary = coal mining, vanadium mining, maize, nut, sugar cane farming, forestry, citrus, agriculture.(2)
(b) Secondary = stainless steel production, paper mills, sugar refineries/mills, industry. (2)
(c) Tertiary = Wildlife tourism Eco-tourism (2)
Examples must come specifically from the source material.

There must be clear evidence that the candidate has engaged with the source material through the examples provided.

- 1.3.4 (a) Maputo Corridor has been developed along the **N4**. (2)
(b) The national route favours development along the corridor region for the following reasons:
 - This route ultimately **links the Johannesburg-Tshwane metropol to the Maputo harbour**.
 - The large **industrial regions** of Emalahleni and Middelburg occur along this route.
 - **Good fertile farming land** and
 - **Wildlife tourism opportunities**, which all bode well for development.
 - **Power supply** – necessary for heavy industry (sugar/ saw mills).
 - Land available.
 [Any 2 points which cover above mentioned concepts] (4)
- 1.3.5 (a) Industrial decentralisation relates to an economic strategy, which aims to develop activities and opportunities away from a central economic core area/periphery (2)
(b) Possible disadvantages of decentralisation include:
 - Market areas, as examples Nelspruit/ Emalahleni become further away.
 - Industries do not always benefit from being close to one another (agglomeration).
 - Additional infrastructure development and spend is required, which comes at huge cost. Difficult to provide services to outlying areas.
 - Pollution in previously clean areas.
 - Labour pool/skilled labour is far away
 - Possible delays in the production process add to transport costs
 [Any 3 appropriate challenges mentioned] (6)

1.4 Drainage Systems and River Catchment Management

- 1.4.1 (a) Surface runoff: is the flow of water that occurs when excess storm water, meltwater, or other sources flows over the earth's surface. Any reference made to water on the surface is accepted. (2)
- (b) Upper course: this describes the early stages of a river, closer to its source, associated with steeper gradients and a narrow channel, first order stream. (2)
- 1.4.2 Two tributaries of the Olifants River:
- Elands River
 - Wilge River
 - Klein-Olifants River
 - Steelpoort River [Any 2 of the above] (4)
- 1.4.3 Direction of flow: easterly/ north easterly/ENE. (2)
- 1.4.4 Temporary base level – Witbank Dam, possible response – river confluence (2)
- 1.4.5 (a) Drainage pattern = dendritic. (2)
- (b) Underlying geology: uniform slope, horizontal massive igneous rock, equally resistant, homogenous underlying geology. (2)
- 1.4.6 Drainage basin order = 3rd order (2)
- 1.4.7 **Three** ways in which people have impacted upon the Olifants drainage basin include:
- **Mining and agriculture** – pollution of water through harmful chemicals, toxic waste and pesticides. Acid mine drainage.
 - **Overgrazing and hence soil erosion** – increased deposition and impact on river silt content.
 - Due to agriculture and mining, likely that **natural wetland systems may have been drained**, canalised and most certainly heavily polluted by these activities.
 - **Construction of dams** – over 30 in the catchment area – impact upon natural flow characteristics of the river.
 - **Pollution of the dam through various activities**
[Any 3 relevant points which must be carefully explained. Reference to fact file information is important, points must be suitably distinct] (6)
- 1.4.8 Strategies to ensure river discharge remains at a suitable level in lower course:
- Candidates must make reference to river discharge, pollution is not a relevant concept to consider in this question.
 - Wetland restoration and health – wetlands provide a useful water storage and release system.
 - Restriction in the number of future dams built in this catchment.
 - Regular release of water from dams in the rainy season.
 - Reduction in water usage for industry and agriculture – better water management and reticulation systems need to be put in place.
 - GM crops that have been modified for drier conditions, planting water-wise/indigenous vegetation
- [Any 2 relevant and appropriate strategies, suitably distinct ideas/ concepts] (4)

100 marks

SECTION B CLIMATE AND WEATHER AND GEOMORPHOLOGY**QUESTION 2 SYNOPTIC WEATHER MAP ANALYSIS, HURRICANES IN THE CARIBBEAN, VALLEY CLIMATE, DRAINAGE SYSTEMS AND FLUVIAL PROCESSES****2.1 Synoptic Weather Map Analysis**

2.1.1 **List** THREE pieces of climatological evidence.

- Presence of a low pressure cell – thermal low over the interior, also coastal LP.
 - Cold front of mid-latitude cyclone too far south to influence climate.
 - The air temperatures over the interior are high and the dew point temperatures are also high – generally the atmospheric temperatures are warmer in summer.
 - The ridging of the South Atlantic high around the southern Cape coast./ South Atlantic HP is further south
 - This represents the shift of the HP belt southwards in summer (to about 35° South).
 - Dry Western Cape
 - Line thunderstorms/moisture front over the interior
 - Cloud cover over the interior
- [Any 3 suitable pieces of evidence] (6)

2.1.2 **Name** the climatological features.

- A coastal low
- B moisture front; low pressure trough axis/line thunderstorms/squall line, Taljaard's line thunderstorm theory
- C cold front (6)

2.1.3 The South Atlantic High is **far south** and **ridging** around the southern Cape coast. This **blocks the movement** of the **mid-latitude cyclones northwards**. Onshore winds (S-SW winds along the SE coast, this leading to cloud cover. (4)

2.1.4 **Compare** the weather conditions on either side of the line labelled B. Refer to air and dew point temperatures, cloud cover and wind direction. (8 × 1 = 8)

This is a very difficult question to mark. Markers looked closely to ensure that a candidate had made a definite comparison. If candidates provide a typical 'textbook response', a max of 4 marks can be awarded.

Named 3 weather stations, described conditions correctly, candidates can get 8/8 marks. If they described weather stations without naming them, but some projection across line B was evident a maximum of 4 marks could be allocated

Weather elements	NE of the moisture front	SW of the moisture front
Air temperature	Ranging from 26 – 30 °C	Ranging from 24 – 29 °C
Dew point temp	Low dew point temperatures 13 – 16 °C Large range between the two temperatures	Dew point temperature higher and closer to the air temperatures 11 – 17 °C Smaller range between the two temperatures
Cloud cover	½ – ¾ cloud cover	Clear skies (mostly)
Wind direction	Westerly to north westerly	North westerly generally to NNW winds

- 2.1.5 The partly cloudy conditions experienced in Bloemfontein, as shown on the weather station, is due to the fact that a moisture front passes through the city, associated with cloudy, unstable conditions./ Air is being forced to rise ahead of the moisture front/ upliftment or convection of air in a LP (2)

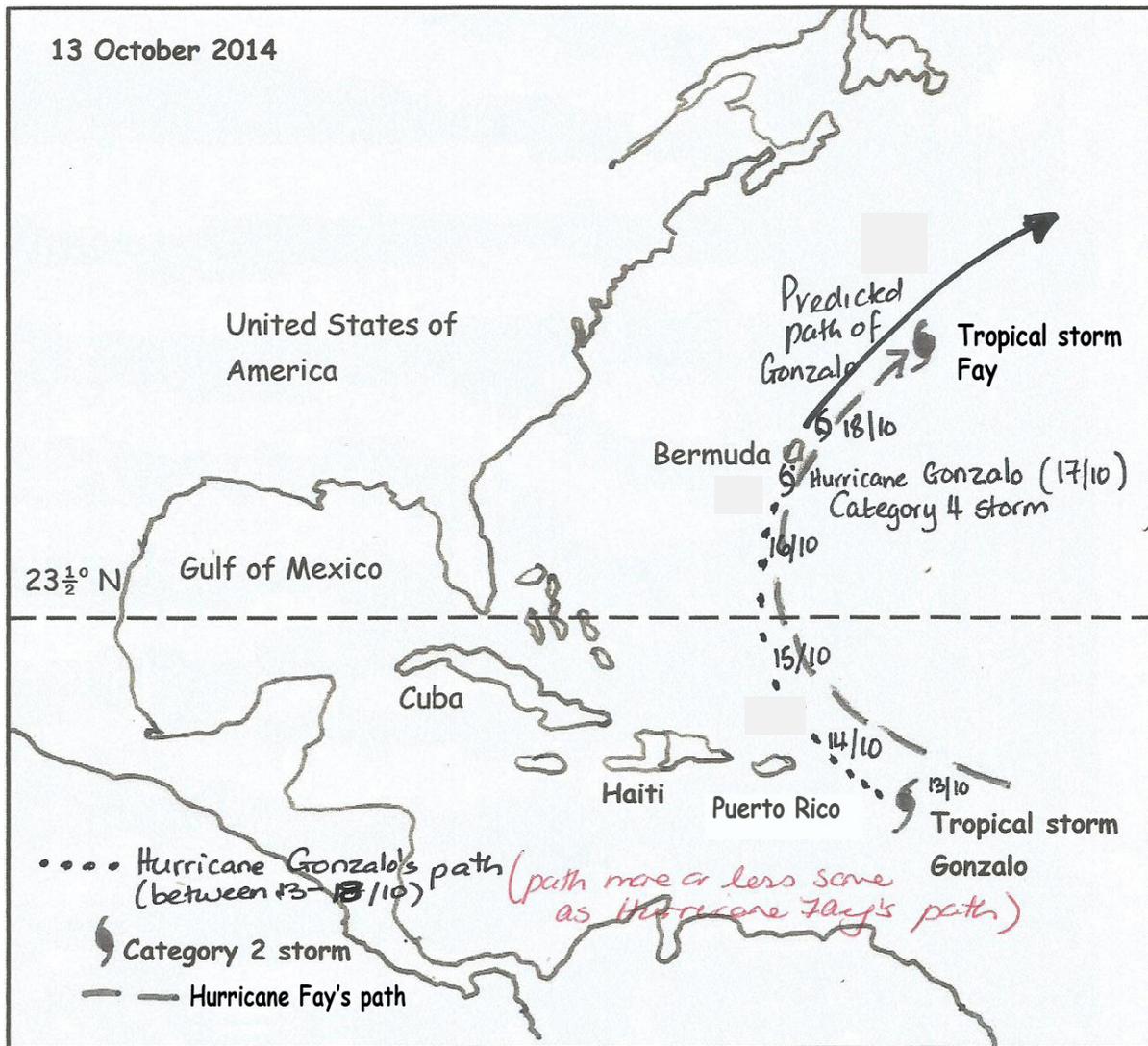
2.2 Hurricanes in the Caribbean

MULTIPLE CHOICE

Select the most appropriate option from the list. Write down only the number and correct letter, for example: 2.2.1 – A.

- 2.2.1 A tropical storm surge is ...
C a wave of sea water caused by strong winds. (2)
- 2.2.2 In a Category 4 storm, hurricane force winds blow at speeds of approximately ...
D between 175 and 250 km/h. (2)
- 2.2.3 When a hurricane makes landfall it ...
A eventually dissipates. (2)
- 2.2.4 Hurricanes occur in the north Atlantic during ...
C late summer. (2)
- 2.2.5 Hurricane Fay was the ... storm of the season in this region.
B 6th (2)
- 2.2.6 Answer (a) and (b) on the Answer Sheet. Complete the key.

Figure 5: Map to show Hurricanes Fay and Gonzalo's path.



See mark sheet for correct answers for (a) and (b).

- (a) **Fill in** the path that Hurricane Gonzalo took between 15 and 18 October 2014 on your Answer Sheet. (4)
 2 marks awarded for general direction
 2 marks awarded for showing that the hurricane made landfall on Bermuda on 17/10.
- (b) **Indicate** the predicted path of Hurricane Gonzalo from 18 October onwards on your Answer Sheet. (2)
- (c) **Explain** why hurricanes frequently occur in this area. (4)
- Warm tropical oceans where water temperatures are over 27 °C.
 - Occur 5° north of the equator for coriolis force to be effective.
 - Long summer season of heating of the ocean waters; continued periods of evaporation leading to instability.
 - High levels of humidity
 - This area lies between 5 and 30 degrees N of the equator
 - Light and variable winds or low amounts of wind shear must exist
- [Any 2 suitable explanations]

2.2.7 **Evaluate** the strategies that Bermuda has in place and could consider to help prepare for and manage the effects of hurricanes. Refer specifically to:

Warning systems and preparedness

- Bermuda is well prepared as stated in the article, the airport was shut/closed a few days before the hurricane was expected to make landfall.
- The use of satellite imagery means that Bermuda would have advanced monitoring systems in place to issue warnings.
- They have planned evacuation systems
- They have early warning systems in place
- As a result of Hurricane Fay, roads were still blocked by fallen debris, trees blown over and about 31 200 homes were still without electricity. Repair work had not been implemented before Gonzalo arrived.
- Stores had sold out of generators, candles, gas and batteries by the time the warning was issued; people were more alert with the approach of Gonzalo, as they had just experienced Hurricane Fay.
- They can build flood barriers
- They must board up their windows

The built environment

- Bermuda has very strict building codes that make structures capable of withstanding storms. (8)

2.3 **Valley Climate**

Refer to the Answer Sheet for Questions 2.3.1 (a), (b) and (c).

2.3.1 (a) Use the field sketch of the valley on page ii of the Answer Sheet. **Annotate** the following aspects of microclimate on the Answer Sheet:

- north-facing slope
- south-facing slope
- where the frost pocket is likely to occur
- thermal belt

(See diagram, each label is worth 2 marks.)

(8)

(b) A temperature inversion often occurs during winter in this valley. **Illustrate** and fully label the diagram on the Answer Sheet to show how and why a temperature inversion occurs in this valley. (6)

Concept of temperature inversion must be understood

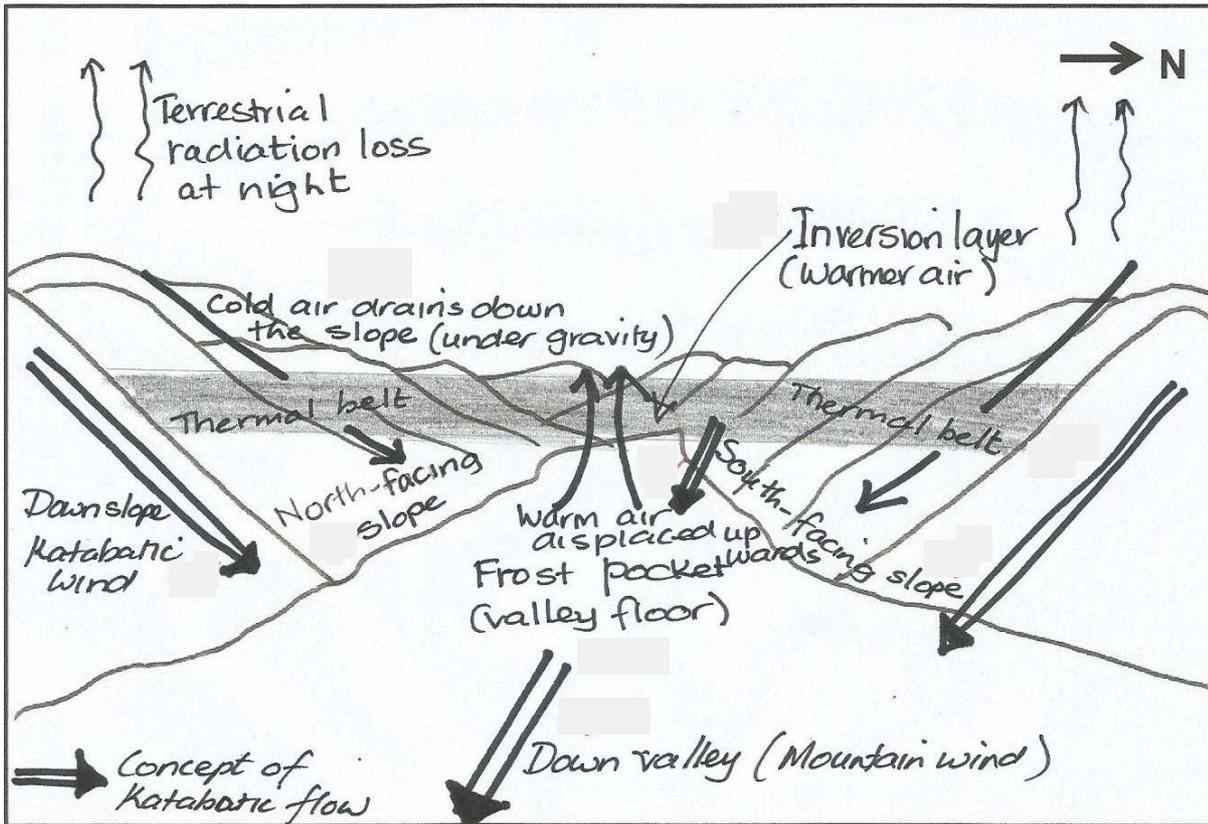
(c) Add labels to the diagram on the Answer Sheet to show how katabatic winds occur in this valley. (4)

Must show understanding of the concept of katabatic air flow

2 marks awarded for arrows on diagram

2 marks awarded for indicating cold air sinking down into the valley

Arrows do not have to be indicated on both sides of the valley, one side will suffice



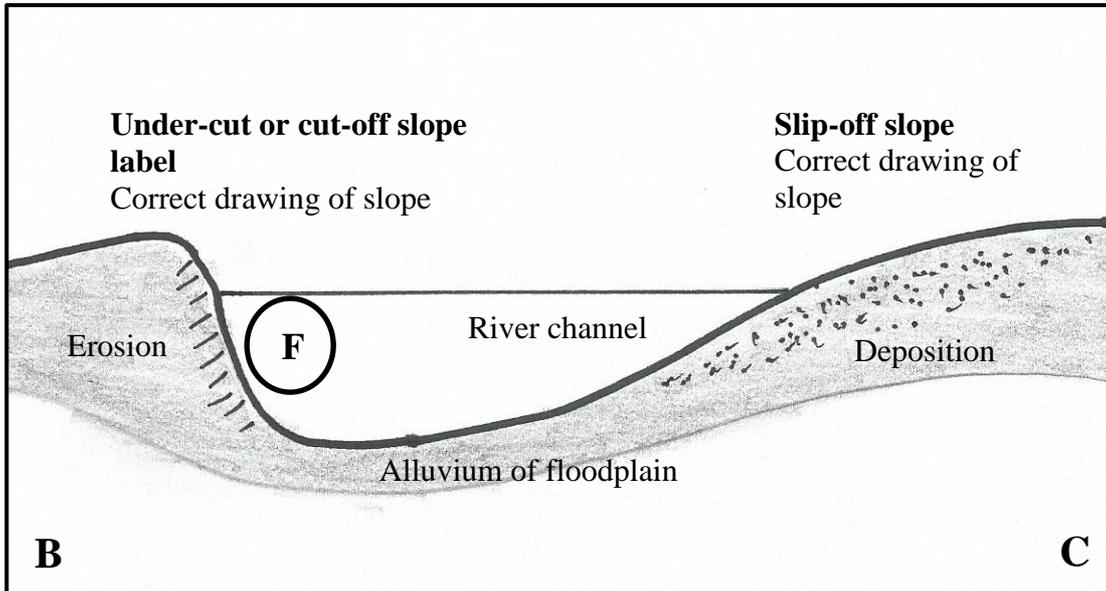
- 2.3.2 Most of the land-use activity, in Photograph 3, takes place along the valley floor. **Account for** this extensive use of the valley floor. (6)
- River and flood plain, therefore more fertile soil.
 - The valley floor is flatter, making it easier for cultivation.
 - More settlements as the slopes of the valley are very steep and difficult to build on/ expensive to build on.
 - Water available from runoff and dams.
 - Protected by the mountains.
 - Closer to the water table
 - There is access to a road
 - Katabatic winds bring cold air onto the valley floor is needed to grow grapes effectively
- [Any 3 valid points]

2.4 **Drainage Systems and Fluvial Processes**

2.4.1 **Select** the correct underlined word. Write down the answer next to the question number in your Answer Book.

- (a) The river shows typical **plain** stage features.
- (b) The river flow pattern is predominantly **laminar**.
- (c) The gradient of the river course is **gentle**.
- (d) Fluvial feature labelled A is a **meander**.
- (e) The river in Photograph 4 is a **graded** river as there is just enough energy to carry its load. (10)

- 2.4.2 (a) Draw a well-labelled transverse (cross) sketch section of the Breede River from B – C as shown on Figure 7 and Photograph 4. (6)



Shape – correct orientation

- (b) On the section drawn in Question 2.4.2 (a), **indicate** where the fastest flow of the river occurs. (F) is representative of the area of fastest flow. (2)
- (c) **Account for** the difference in the speed of river flow at Feature A. (4)
- The water flows faster on the outside of the meander, where the river depth is greater and there is less friction (surface and bed). (Can get 4 for describing this first point)
 - The water flows slowly on the inside of the meander curve as the river is shallower and there is more friction in relation to the surface area.

100 marks

SECTION C RURAL AND URBAN SETTLEMENT AND ECONOMIC GEOGRAPHY OF SOUTH AFRICA

QUESTION 3

3.1 Rural Settlement

3.1.1 **Cradock's situation:** Situated within the Karoo region of the Eastern Cape province, 249 km NE of Port Elizabeth along the N10. Upper valley of the Great Fish River. Candidates must provide detailed and specific responses making reference to the Fact File. (2)

3.1.2 According to Davies, central places are arranged in a hierarchy. This relates to the **number of functions** and **order of functions** these places have. There is a strong correlation between **function and population size**.

Therefore on the settlement hierarchy, a village would be classified **below/beneath** a town since it has **fewer functions (especially that of high-order)** and consequently a **lower population**. Cradock appears to fall between a village and a town based on the number of functions it has and population size. (4)
 Insufficient functions to be a town, but a larger population than a village. Candidates must make some reference to population, function and the rank order of the settlement.

Reference must be made to hierarchy and function to get full 4 marks.

3.1.3 (a) New ruralism, also accept counter urbanisation, urban-rural migration (2)

(b) Economic diversification beyond agriculture in the area is important for the following reasons: (4)

- Cradock is in the Karoo and may face risks associated with drought.
- Fluctuating (wool)prices may lead to economic instability in the area.
- Mechanisation of farms has led to fewer job opportunities.
- Prevent further urbanization
- Keep smaller businesses profitable
- Rural sustainability
- Can list push factors or counter-push factors

[Any 2 valid points may be accepted here]

3.2 Rural Settlement Issues and Agriculture in the Cradock Region

3.2.1 Biofuel is a form of fuel (ethanol), which has been produced from a starch crop, in this case beetroot and sorghum (must be specific, reference made to starch crop, if candidate has mentioned “an alternative fuel source”, this was not accepted. Biofuel is **renewable and cleaner energy** resource and hence the government is looking to invest in such initiatives. Load-shedding – electricity expensive and unreliable. Fossil fuels are finite. Candidates must explore both what and why in order to earn the full 4 marks. (4)

3.2.2 Factors favouring agriculture in the Cradock region:

- Good, fertile soils
- Available water supply via the Fish River irrigation scheme
- Good climate
- Flat relief
- Cheap labour available

Factors hindering agriculture in the Cradock region:

- Poor administration and limited support/ funding for small-scale/ start up/ emerging farmers.
- Many small-scale farmers may lack the necessary skills required to run a farm.
- Drought.
- Landless people
- Crime
- Distance to markets
- Fracking
- Land disputes

(2 × 2 = 4)

- 3.2.3 (a) Land reform is a policy set out by the government to address the cases of landless people across rural South Africa due to former apartheid policy. (2)
- (b) Access to land in a rural context is a form of **food security** for a family. Access to land is also a **means of addressing the widespread poverty** situation across rural South Africa. Land reform also addresses apartheid laws (former Homeland policies) whereby people were dispossessed of land. (4)
- (c) TWO challenges of the Cradock land reform project include:
- Poor administration
 - Lack of clarity and decision-making around the project
 - Disputes around the sale of land and land value/ corruption
 - Length of time associated with land reform projects often leaves local communities frustrated and disappointed
 - Can't afford running costs
 - Legal disputes
 - Migration of econ active leaving old/young to run farm
 - Lack of skills
- [Any 2 relevant points, points must be suitably **explained**, if a list is provided, only 1 mark will be awarded/correct point] (4)

3.2.4 Factors influencing food security include:

- Climatic factors (drought is a reality/ floods) – increasing concerns of the impact of climate change on the agricultural sector.
- Access to land, flawed and slow land distribution/ redistribution processes.
- Lack of start-up finance and support for emerging farmers.
- Rising food prices.
- Growing populations.
- Poor farming techniques
- High unemployment rates
- Insufficient transport to get food to markets
- Role of women
- Wide range of climatic regions, so can produce wide range of goods

[Any 2 factors identified, points must be distinct; can be positive or negative] (4)

3.2.5 The Cradock biofuel project may have assisted with food security in that people would have gained **access to land**. Through the biofuel project people would be **earning an income** which would increase their ability to feed the family. The project would include skills training and ultimately would assist farmers with a **better yield**.

On the negative side, **food supply is now being used for biofuel**, meaning less food production. **Less land may be available for subsistence farming** due to the fact that land may now be required for the biofuel project.

[Any relevant point discussed, at least 1 positive and 1 negative] (4)

3.3 **Urban Settlement**

3.3.1 A mixed landuse development contains various forms of urban landuse within a compact urban region. For example, residential, recreational and commercial all within a smaller area. (2)

3.3.2 There is a trend towards increasing mixed-landuse developments across the world. This is due to various reasons:

- Fewer people wanting to spend time and money commuting to their place of work – avoiding congestion, convenience and saving time
 - Increasing fuel costs and emissions policies, concept of a ‘green city’ or sustainable cities
 - Increasing space constraints for the development and expansion of urban areas, land is scarce, land is increasingly more expensive
- [3 points accounted for] (6)

3.3.3 Modderfontein is well suited to a mixed landuse development for the following reasons:

- Good transport links (Gautrain route and major highways, eg N3).
- Close proximity to the financial hub (of Sandton and the ORT airport).
- Adequate space for the development. (4)

3.4 **Coal Mining in South Africa**

3.4.1 Mpumalanga area/ Emalahleni (Witbank) area (2)

- 3.4.2 The importance of coal mining to South Africa:
- Employment opportunities
 - Earning of foreign exchange through the export of coal
 - Coal is an important commodity as far as energy supply is for the entire country and economy [Any 2 relevant factors] (4)
- 3.4.3 Highest level of coal consumption was in 2008/2014. (2)
- 3.4.4 Net exports appear to be gradually on the rise from 2003 – 2014 as the gap between consumption and production rates has increased. Any reference to **increasing** is acceptable for 2 marks (2)
- 3.4.5
- Coal consumption rates in 2015 are likely to have **decreased temporarily** due to load-shedding. This is because Eskom has been unable to keep up with electricity demand due to aging infrastructure and ongoing maintenance. This means over load-shedding periods, less electricity was generated leading to the lower coal consumption. Due to load-shedding, **people and businesses may have become increasingly aware of lowering their electricity usage**, which will also lead to lower coal consumption.
 - Production rates of coal will not have been lowered in 2015. If consumption rates decrease, it is likely there will be **more coal available for export purposes**. (4)
 1 mark awarded for indicating whether consumption rates have increased/decreased, and 1 mark awarded for reason
 1 mark awarded for indicating whether export rates have increased/decreased, and 1 mark awarded for reason open to interpretation
- 3.4.6 Factors which are likely to hinder the coal mining industry in South Africa include:
- Environmental policies
 - Expense of mine rehabilitation projects – especially in the light of open-cast mining.
 - Labour disputes and increasing strike action, nationalization of mines
 - Reduction in global demand for the commodity due to the shift towards renewable and more sustainable energy.
 - Fluctuating global prices.
 - Excessive usage of water in a country that is water scarce.
 - Coal is a finite resource
 - Underground water
 - Lack of skilled manpower
 - Bad press – decreased demand
 - Increased costs of mining
- [Any 3 appropriate points which have been discussed] (6)

3.5 Industry in South Africa

3.5.1 Match the columns

- 1 – D
- 2 – F
- 3 – G
- 4 – B
- 5 – C

(10)

3.5.2 Gauteng essay question

Criteria	(Level 3) Excellent – Good	(Level 2) Satisfactory	(Level 1) Poor
<p>Writing skills</p> <ul style="list-style-type: none"> Taking into consideration structure and presentation Use of brief introduction and conclusion Logical discussion and use of subheadings [recommending 5 marks allocated to this component] 	<p>Suitable introduction and conclusion. Sophisticated, coherent and structured writing. Subheadings and paragraphs have been effectively used. Essay is concise, well structured and succinct. (5 – 4 marks)</p>	<p>Introduction and conclusion present, although not ideal. Attempts to adhere to subheadings and use of paragraphs. Essay deviates from the point in places and lacks brevity. (3 – 2 marks)</p>	<p>Writing is weak and almost unintelligible. No introduction or conclusion provided. No use/ adherence to subheadings. Long sentences, poor grammar and ineffective use of paragraphs. Essay is repetitive. Bullet points may have been used. (1 mark)</p>
<p>Content knowledge</p> <ul style="list-style-type: none"> Correct use of geographical terminology and concepts Adherence to topic and subheadings [recommending a minimum 50% of total marks be allocated here] 	<p>Relevant content and detailed discussion of topic. Good usage of geographical terminology and concepts. Appropriate number of facts presented/ subheading. At least TWO factors have been discussed under each subheading. (6 or more facts) (10 – 8 marks)</p>	<p>Some relevant content. An overview/ general discussion of key issues. Basic usage of geographical concepts and terminology. (50 – 60 % of required facts presented/ subheading). At least ONE factor has been discussed under each subheading, with additional TWO factors in two of the sections. (4 – 5 facts) (7 – 5 marks)</p>	<p>Digression from the topic. Weak grasp of concepts and terminology. Superficial/ poor discussion. Almost no relevant facts/ subheading. Only ONE factor has been outlined in each subheading or some of the sections have not been addressed, for example THREE factors are discussed under the one subheading and none in the other sections. (3 or less facts). (4 – 1 marks)</p>
<p>Supporting evidence – analysis and understanding</p> <ul style="list-style-type: none"> The ability to <i>analyse and evaluate</i> the topic is assessed in this category. Reference made to case study material/ fact file/ source material provided. If appropriate, reference must be made to familiar/ local or other examples. [recommending 5 marks allocated to this component] 	<p>The candidate is able to argue and evaluate appropriately. There is strong evidence of accurate application of understanding and evidence provided. Essay demonstrates understanding and integration of relevant case study/ fact file/ source material into the context of the essay discussion. (5 – 4 marks)</p>	<p>Superficial links made to case study/ fact file/ source material. Although reference to supporting examples has been made, it is not clear that the candidate has a good understanding of the example/ case study material. Supporting evidence does not always relate appropriately to the subheading or context of discussion. Discussion lacks depth. (3 – 2 marks)</p>	<p>Limited to no reference made to case study/ fact file/ source material. Examples not provided. Has little to no geographical meaning. Little analysis or understanding. Demonstrates minimal understanding of topic. (1 mark)</p>

Key points to discuss in essay include:

- **Factors influencing the location of Gauteng as an industrial area:**
 - ❖ Mining activities originally attracted a workforce who was then able to diversify into other sectors (industrial-commercial).
 - ❖ Large, sophisticated and skilled workforce – this has led to a large market area and demand for goods and services. Attracting investors to the region.
 - ❖ Sophisticated transport network [eg ORT International airport, rail network linking to the ports and hinterland, recently upgraded highway system (N1, N3, N12), Gautrain].
 - ❖ Centrally positioned making the region and resources easily accessible.
 - ❖ Extensive, flat land allowing for industrial development and expansion.
 - ❖ Eastern side of the 500 mm isohyet, although water transfer schemes via the Tugela and Lesotho Highlands are required to keep the Vaal Dam with an adequate supply of water for growing industry.

- **Main industrial activities in the province:**
 - ❖ Iron and steel industry, eg ArcelorMittal – also steel plants in Vanderbijlpark and Vereeniging.
 - ❖ Engineering and metal processing – Kempton Park area.
 - ❖ Vehicle assembly (BMW/ Ford) – in Rosslyn.
 - ❖ Beverage, confectionary and food processing. Also fertiliser, cement and synthetic rubber factories.
 - ❖ Petrochemical industries on the border of Gauteng – Sasolburg.

- **Challenges facing the economy of Gauteng:**
 - ❖ Increasing urbanisation and hence a growing population.
 - ❖ Limited job opportunities.
 - ❖ Inability to keep up with maintenance of an aging infrastructure (water supply, electrical grid, suburban road network).
 - ❖ Power supply issues with Eskom being unable to keep up with demand.
 - ❖ Crime and corruption and mismanagement of public funds.
 - ❖ Traffic and road management.
 - ❖ Strikes and protests

Accept any geographically relevant points under each heading.

100 marks

Total: 300 marks