NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2017

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 THE BRAAMFONTEIN SPRUIT, JOHANNESBURG, GAUTENG

1.1 Geographical Information Systems

1.1.1 Delta Park to Melville Koppies Mountain Bike Route/Melville Koppies Route/Delta Park Route/Braamfontein Spruit Route

1.1.2
- Trail labels
- Routes
- POI (points of interest)
- Places
- Polygons
- Difficulty (Trail style)

(Any 2)

1.1.3
- Gradient of the route (105 m climb)
- Distance of the route (1,5 km)
- Level of difficulty (blue)
- Descent (–8 metres)
- Condition – unknown
- View trail (1 photo, video)
- Route

If candidate only writes numbers – not accepted
(Reference to any 2 points)

1.1.4
- A mountain biker is able to plan his/her cycle effectively.
- The cyclist would be able to determine whether his/her level of fitness is suitable for the route.
- Plan how long the ride may take, based on distance, gradient and level of difficulty.

(Any appropriate response, 2 points provided – must have some link to gradient/distance/level of difficulty)

1.1.5 (a)
- Bicycle repair and service centres, bicycle clothing/ accessories
- Specialist Bicycle shops, e.g. Cycle Lab
- Coffee shops for cyclists to meet afterwards for coffee/ breakfast
- Gyms/training centre
- Fencing companies – for security of cycling areas
- Security personnel
- Mobile refreshment stations
- Tourism opportunities
- Bicycle factory/manufacturing of parts
- Bike Parks
- Entrance Fees
- Security/fencing of parks
- Mobile water points
- Medical facilities

(Any 2 appropriate examples)

(b)
- Bicycle repair and service centres – tertiary
- Specialist bicycle shops – tertiary
- Coffee shops for cyclists to meet afterwards for coffee/ breakfast – tertiary
- Gyms – tertiary
- Bicycle factory/manufacturing of parts – secondary
- Water sales – informal

(Note: both examples are likely to be tertiary. Candidates are able to earn 4 marks, even if **both** examples relate to tertiary activities, if candidate only writes tertiary a max of marks are awarded)

1.2 Drainage systems, catchment and river management

1.2.1 (a) The water flowing overland when the soil is saturated and the ground impermeable is referred to as **surface runoff**.

(b) The process of altering a river channel to improve flow is referred to as: **canalisation**.

(c) The point where a river originates from, normally in the form of a natural spring is called: **the source**.

1.2.2
- Outspan Spruit
- Montgomery Spruit

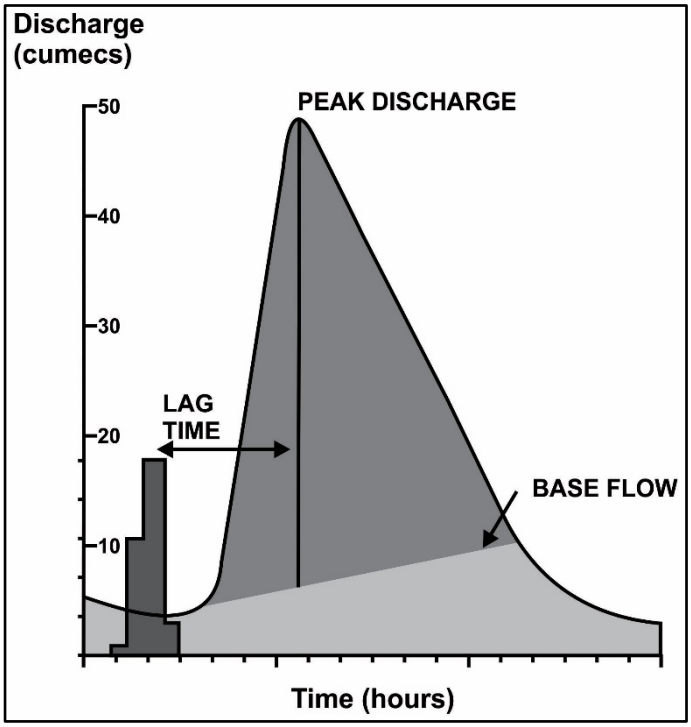
(Note: Canal is not an acceptable answer.)

1.2.3 Emmarentia Dam (not Delta Park)

1.2.4
- Canalisation of the natural river channel.
- Extension of the drainage basin network via the storm water drains.
- Increased number of impermeable surfaces increasing runoff in the drainage basin – increased runoff and blockage of river channel due to rubbish is also linked with urban development and expansion.
- Installation of weirs.
- Power lines too close to river channel.
- Installation of bridges across the river.
- Flow intercepted/blocked by rubbish
- Dam will have impacted upon volume and velocity downstream

(Any 3) (Accept other relevant suggestions; responses **must** refer directly to **channel flow**, changes to water pH and chemicals in water do not address this question.)

1.2.5
- Base flow labelled (2 marks)
- Lag time, must be short, from max rainfall to peak discharge; rainfall graph must be drawn for full 2 marks to be awarded; if no rainfall graph only 1 mark awarded (2 marks)
- Peak discharge – must be distinct (2 marks)
- 2 marks awarded for an accurate, well-drawn graph with axes correctly labelled (x- time, y- discharge) axis (1 mark) Shape of graph (1 mark)



[Source: Ace Geography]

1.2.6
- Blocked drains will result in an **increase in surface runoff/ flooding**. (2 marks)
- This will cause a **decrease in discharge** initially until the runoff makes its way into the river system. (2 marks)
- Must have Discharge AND Runoff.
- Increase/decrease in surface runoff (1 mark) explained (1 mark)
- Increased/decreased discharge (1 mark) explained (1 mark)

1.3 Urban structure and land use

1.3.1 Greenbelt/recreational zone/suburban/residential/park/public space

1.3.2
- Jan Smuts Ave
- William Nicol Drive
- Witkoppen Road
- M7

1.3.3 The Spruit area is an important 'Green lung' or greenbelt area in an otherwise very built-up area of Johannesburg (2 marks). It provides ample open space for walkers, runners and cyclists to enjoy fresh air and outdoor life in an urban area (2 marks).
Biodiversity corridor.
(Any 2 appropriate points – mention of Greenbelt/green lung/ recreation to get full 4 marks.)
(Can elaborate fully on 1 point to get 4 marks)

1.4 The Informal Sector and Urban Settlement Issues

- **A description of the work typically performed by waste pickers**
  Waste pickers are people who search through urban rubbish bins and remove recyclable material such as plastic and glass which they take to various recycling depots across the city in exchange for a small payment. Informal, unregulated.

- **Challenges waste pickers face on a daily basis**
  - Discrimination by higher-income earners.
  - Repercussions/negative reactions from residents.
  - Health hazards – toxic and dangerous waste.
  - Irregular income, fluctuating prices/money paid to waste pickers for recyclable material.
  - Differing volumes of waste available according to time of the year/month, i.e. Festive season – waste may increase.
  - Waste needs to be transported a fair distance – this is hugely challenging.
  - No formal working/sorting premises – laws/regulations.
  - Long working hours.
  - No workers' benefits.
  - Exposed to the elements and criminals.
  - Transport challenges.
  - Very physically taxing task.
  - Face danger on city roads as drivers are reckless and may knock over or bump into a waste picker.
  - Cartels in operation.

  (Credit other relevant points.)

- **The importance of waste picking to the informal sector of South Africa's economy**
  - People are earning a small income through this process and are able to support a family (up to R120 earned per day).
  - Waste pickers may be able to resell some of the items collected further contributing to their income.
  - Waste pickers may start up their own informal recycling depot/ centres.
  - Unemployment levels will reduce.
  - Alternative forms of employment are generated through the recycling/waste picking industry – this will assist in crime reduction.
  - Contribute to environmental sustainability.

  (Credit other relevant points.)

- **The positive role waste pickers play in the environmental sustainability of urban areas in southern Africa.**
  These individuals play an important role in **reusing and recycling products**, and hence **reducing the amount of waste** that goes to the various landfills.
  Cities are also **cleaned up** through the process – storm water drains, river/park areas.
  Reduction in pressure on landfill sites.
  Contribute to environmental sustainability.
  Limit the spread of disease.
  (Any relevant point – focus must be on urban centres)

See detailed marking rubric – mark accordingly

Criteria	(Level 3) Excellent – Good	(Level 2) Satisfactory	(Level 1) Poor
Writing skills • Taking into consideration structure and presentation. • Use of brief introduction and conclusion. • Logical discussion and use of subheadings. (5 marks allocated to this component)	Suitable introduction and conclusion. Sophisticated, coherent and structured writing. Subheadings and paragraphs have been effectively used. Report is concise, well-structured and succinct. **(5–4 marks)**	Introduction and conclusion present, although not ideal. Attempts to adhere to subheadings and use of paragraphs. Report deviates from the point in places and lacks brevity. **(3 marks)**	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. Report is repetitive. Bullet points may have been used. **(2–0 marks)** 1 = must be awarded for any form of written attempt / effort
Content knowledge • Correct use of geographical terminology and concepts. • Adherence to topic and subheadings. (14 marks allocated here)	**(14–12 marks)** Relevant content and detailed discussion of topic. Good usage of geographical terminology and concepts. Appropriate number of facts presented / subheading. Minimum of 2 points for every sub-heading will earn candidate 12 marks. Extension work will provide a further 2 marks.	**(11–7 marks)** Some relevant content. An overview / general discussion of key issues. Basic usage of geographical concepts and terminology. (60–50% of required facts presented / subheading). 1 point / sub-heading, or 2 points provided and only 2 paragraphs.	**(6–0 marks)** Digression from the topic. Weak grasp of concepts and terminology. Superficial / poor discussion. Almost no relevant facts / subheading.
Supporting evidence – analysis and understanding • The ability to analyse and evaluate 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. (5 marks allocated to this component)	**(5–4 marks)** The candidate is able to argue and evaluate appropriately. There is strong evidence of accurate application of understanding and evidence provided. Report demonstrates understanding and integration of relevant case study / Fact File / source material into the context of the report. Looking for evidence of unpacking content and high order integration.	**(3 marks)** 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.	**(2–0 marks)** 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.

1.5 **Johannesburg's urban climate**

1.5.1 An area of natural parkland within an urban region supposed to replenish the air with oxygen/absorbs carbon dioxide/ pollution .

1.5.2

Micro climate characteristics	**Braamfontein Spruit**	**Inner CBD area of Johannesburg**
Characteristics of the environment	Green parkland area. Trees, grass and natural bush, Braamfontein Spruit flows through the area.	Heavily built up with concrete and tar surfaces. Artificial/unnatural surfaces.
Air quality	Cleaner air, due to the presence of trees – acting as carbon sinks.	Polluted with car fumes, air conditioner gas, some light industrial pollutants, factories.
Daytime temperatures (summer)	24 °C (numbers not important) (accept 22°–28°) Slightly lower	28 °C (numbers not important) Temp must be about 2°–3° higher than Spruit temp. Slightly higher.
Night-time temperatures (winter)	15 °C (numbers not important) Slightly cooler	18 °C (numbers not important) Temp must be about 2°–3° higher than Spruit temp. Slightly warmer.
Humidity and precipitation (summer)	Higher humidity due to transpiration from natural trees in the area, less rain due to cleaner air and fewer hygroscopic nuclei. Maybe evaporation from dam or river. ACCEPT: No Difference between Spruit and CBD	Higher humidity and heavy precipitation due to presence of more hygroscopic nuclei; greater convection, more evaporation. Low humidity due to no surface water for evaporation. Low rain due to low humidity.

Must be a suitable distinction between day and night time temperatures and the two urban areas

SECTION B CLIMATE AND WEATHER AND GEOMORPHOLOGY

QUESTION 2 TROPICAL CYCLONES, MID-LATITUDE CYCLONE AND FLUVIAL GEOMORPHOLOGY

2.1 Tropical cyclones

2.1.1 (a) Tropical cyclones normally occur in the southern Indian Ocean during late summer.

(b) The average sea surface temperatures should be above 26 °C.

(c) Tropical Cyclones move from east to west across the Indian Ocean.

(d) Tropical cyclones are named when the air pressure has dropped to approximately 986 hPa.

(e) Tropical cyclones only start to form 5° north and south of the equator as a result of Coriolis force. [Due to error in Question paper, any response was accepted; no candidate is to be disadvantaged here]

2.1.2 (a)
- The ocean's surface temperatures were still warm and over 26 °C, as a result of global warming and the greenhouse effect.
- During 2016 the hottest temperatures were experienced globally and thus the waters had not started cooling down.
- El Nino is also a factor.

(b)
- Not enough surface heating to cause strong convection current leading to sufficient latent heat to drive and sustain the system – moving away from the equator.
- The system reached cooler waters of the Indian Ocean and so dissipated.
  (Candidate must indicate winter season impact on Tropical Cyclone.)
  (Candidate must refer to the relationship between both temperature and latent heat/energy in order to score a full 4 marks.)

(c) Madagascar is a **large island** to the east of southern Africa in the Indian Ocean. This large island landmass does shield Mozambique and East Africa in that tropical cyclones moving from east to west will hit Madagascar first. (2) **Friction** and **lack of moist air** due to landfall will cause storm to dissipate before hitting Mozambique/East Africa's coastline. (2)

2.2 Mid-latitude Cyclones

2.2.1 A South Atlantic High/St Helena High
(No abbreviations accepted)
B South Indian High/Mauritian High

2.2.2 C Coastal low-pressure system, cyclone

2.2.3 (a) Mid-latitude cyclone/temperate cyclone/extratropical cyclone/ occluded frontal system

(b) Occluded/occlusion stage/dissipating stage

2.2.4 (a) This is an automated weather station where weather is automatically recorded/computerised. Allows for continuous reading of weather elements. Facilitates weather forecasting.

(b)

Weather	Station X	Station Y
Air temperature	22 °C Cooler than Y	30 °C Very high temperature
Cloud cover	Clear No cloud cover at either station	Clear
Wind direction	Westerly	NE
Wind speed	15 knots	10 knots

(*Each point is worth 1 mark in the table above. For the temperature values, if candidates make reference to the notion of max and min temperatures, the answer is wrong.*)

2.2.5
- The South Atlantic High (A) is <u>ridging</u> and will continue to push in from the west and south west.
- The South Indian High (B) will remain in a <u>blocking position</u>. The upper air trough will then be pushed in over the interior and form an intense weather system, which will <u>remain stationary/wedged/ remain in the same place</u> for days until all the cold air and moisture is dissipated.
(Both A+B must be referred to in order to get a full 4 marks.)

2.2.6 **BOX 1: top left corner of map insert**

Areas affected: (1)
May occur over the Free State, Eastern Cape and KZN.
Weather Conditions: (2)
Scattered showers and even thunderstorms. These bring lightning; hail and the possibility of flash flooding as well as damaging winds.
Safety precautions: (1)
Do not shelter under a tree, powerline, on a hilltop or in a picnic shelter.

BOX 2: bottom left corner of map insert

Areas affected: (1)
Along the southern coastal regions, Western Cape.
Weather Conditions: (2)
Cold, moist conditions, high seas and gale force winds.
High swells of +6 m can be expected causing destructive coastal waves. This will hamper shipping and fishing.
Safety precautions: (1)
Harbours are advised to close to in- and out-going shipping. Bathing/swimming along the south coast of the Western Cape should be prohibited during this time as beaches will be closed.

Heavy rain in the Western Cape could produce flash flooding. It is advisable to stay indoors and keep off the roads. If caught hiking avoid crossing rivers where water is above your ankles or travelling along a road that is covered in water.

BOX 3: bottom right corner of map insert

Areas affected: (1)
Over the interior, mountainous regions, Northern Cape, Eastern Cape and Lesotho, Drakensberg

Weather conditions: (2)
Heavy snowfalls – leading to bitterly cold conditions
Heavy snowfalls are likely to continue.
This means that passes and roads may be closed as driving conditions will be hazardous and visibility poor.

Safety Precautions: (1)
Farmers are warned to keep their livestock under shelter, moving the animals to lower altitudes. Young animals may be susceptible to hypothermia.
Owners and guests at high altitude ski lodges and hotels should be on high alert to the condition of the roads. Icy conditions could raise the risk of serious vehicle accidents/being stranded/lost/stuck.
Rather stay indoors/listen to further weather bulletins.

(Only 1 area needs to be mentioned in order to get 1 mark for location/area e.g. Eastern Cape.)

(Only 1 weather condition needs to be mentioned in order to get 2 marks, e.g. thundershowers.)

(Safety precautions must relate back to weather conditions; e.g. Thunderstorms – take cover and avoid shelter under trees (1)

2.3 Fluvial terminology

Column A		
2.3.1	Antecedent drainage	D
2.3.2	Graded river	F
2.3.3	Drainage basin	A
2.3.4	Drainage density	G
2.3.5	Episodic river	C

2.4 Fluvial processes

2.4.1 Dendritic drainage pattern.

2.4.2 (a) Q – rapids/cascades/rocky river bed
R – waterfall

(b) These are a series of rapids. They are caused where a band/ layer of rock may be exposed; or flow over a large rocky outcrop, eroding a path as the water flows. Uneven river bed, rock controlled channel, rock has influenced river flow. Turbulent flow due to rocky channel.

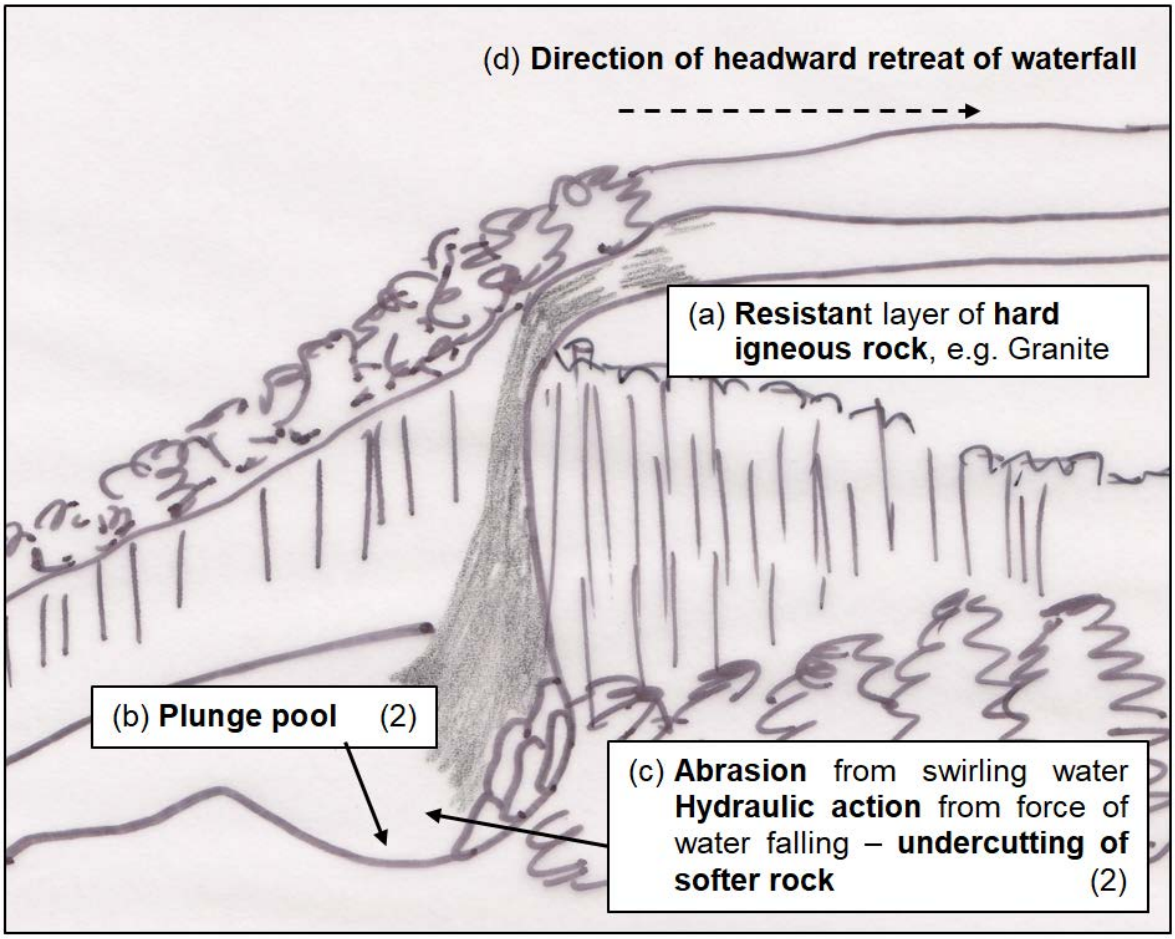
2.4.3 a) Resistant, hard layer of rock, may be specific, e.g. igneous rock – dolerite, granite, basalt. Metamorphic rock is also accepted, if sandstone is used in comparison to a softer rock e.g. shale.

(b) Plunge pool

(c) **Abrasion** from the swirling water; **hydraulic action** from the force of falling water and spray; **undercutting of softer rock** at the base of the waterfall. Head ward retreat, back wasting all accepted.

(d) See diagram. Candidates may use an arrow/describe the backward movement.

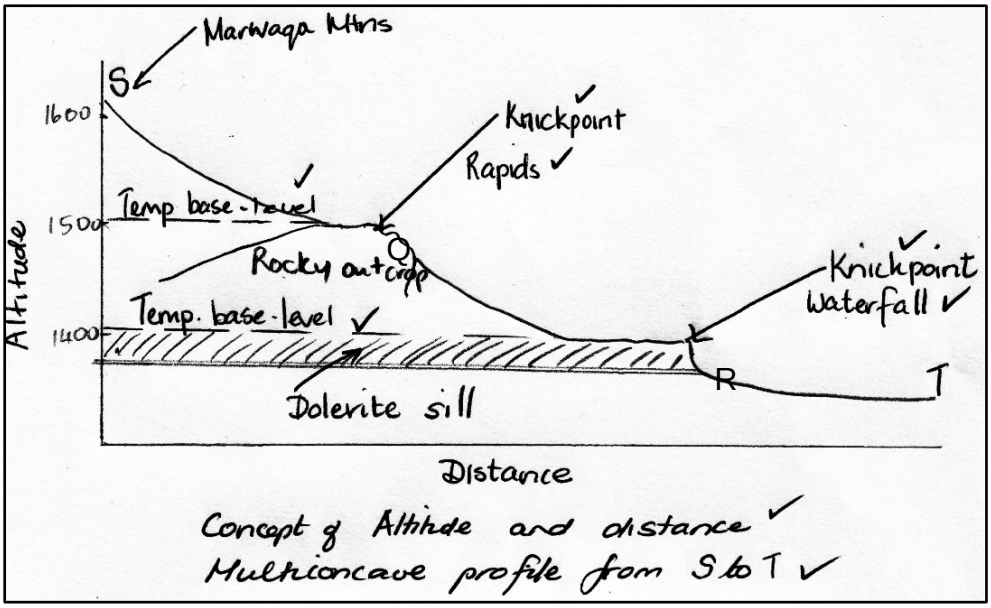
Figure 7: A sketch of the fluvial feature at R (Photograph 4)



Key:

(d) Direction of retreat of waterfall ----------►

2.4.4

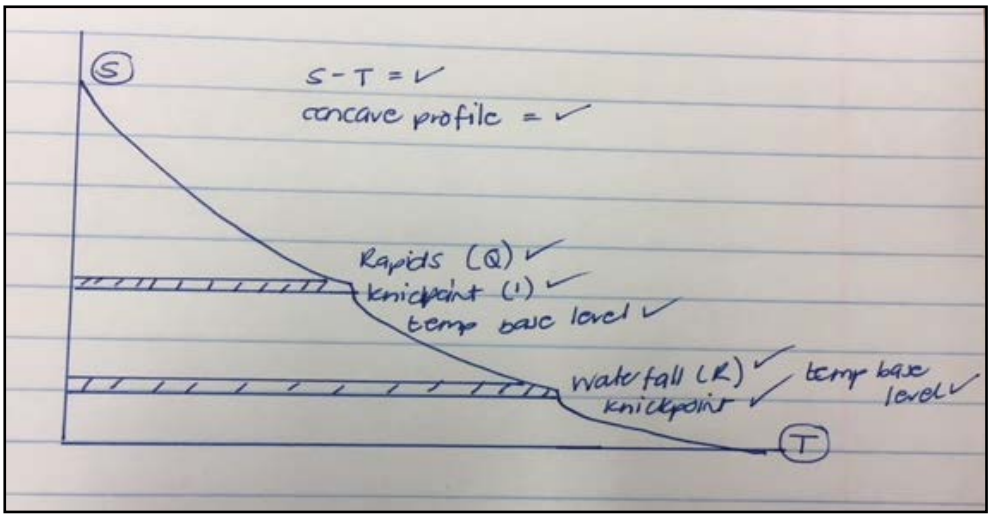


Marks awarded as follows:

- Knickpoints × 2 (1 mark each)
- Temporary base level × 2 (1 mark each)
- Q = Rapids (1 mark), R = waterfall (1 mark)
- Accuracy of profile = 2 marks

(Multi concave; S to T, graded profile)

Simplified diagram:



2.4.5 The map extract shows the river has a **channel with steep sides**. The **knickpoints** will cause an ungraded profile and thus cause **renewed energy (high velocity)** in the river.
The **incised course (incised meander/ingrown meander)** of the river in this upper stage is another indication of rejuvenation. Other features include: terraces, waterfall and rapids. River flow is also likely to be turbulent.

2.4.6 The settlements are located **on the top** of the plateau area (Ashtonvale). The area is hilly/mountainous and therefore the **valleys will be cold and in a frost pocket**. There are no settlements along the valley floors.
The slopes are quite well forested/trees as these are not sensitive to cold, frosty conditions.
Cultivated lands are on the flat plateau areas of the hills also away from the danger of frost.
Settlements are north facing (aspect), within the direct rays of sunlight.
Settlements are within the thermal belt.
Evidence of wind breaks – anabatic and katabatic winds.
(Accept any relevant observation; answer must be focused around the notion of **climate**)

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

QUESTION 3

3.1 Rural Settlement

3.1.1 Situated in the Karoo, in the Northern Cape, 348 km from Cape Town.
(Any ONE of the above factors mentioned). Also accept near Cape Town, near SALT, 18 km from Observatory, NE of Cape Town.

3.1.2 (a) Central place for the surrounding (**sheep) farming community**. Provides goods and services to surrounding population.

(b) Shift to a specialised town is as a result of the **Astronomical Observatory** outside the town. The large telescopes are drawing **researchers and tourists** from around the world, hence the town now has a more specialised function. Also tourism. <u>If only tourism is mentioned, if only the Observatory is mentioned, max 2 marks</u>.

3.1.3 **Extensive:** (2 marks) due to the dry and arid landscape, carrying capacity values are low and therefore **large areas** of grazing land would be required to support sheep. (2 marks); low output/hectare

3.1.4
- Drought
- Extreme temperatures – very cold (snow falls) and very hot
- Jackals/predators
- Fires
- Stock theft/crime
- Limited amount of vegetation for grazing
- Transport costs – far away from major urban centres
- Soil erosion, lack of fertile soil
- Labour issues
- Lack of services
- Stock diseases

(Any TWO appropriate points)

3.1.5
- Bed and Breakfasts in the town (12)
- Guesthouses and guest farms in the area
- Number of bars and restaurants
- Many Capetonians are visiting/buying in the area due to the proximity to Cape Town
- Clear night skies and nearby Astronomical Observatory
- "major economic activities include tourism"

(Any TWO points – which must come from the Fact File)

3.1.6
- **Proximity to Cape Town** and the desire to **escape the city life**.
- **Wide open spaces and clear skies** make Sutherland an appealing escape for city dwellers.
- Due to Astronomical Observatory **more tourists, scientists and researchers are visiting** the town, this is attracting investment and increasing the demand for property.
- Push-pull factors/counter-urbanism/new ruralism (if expanded upon around this issue, candidate could earn all 6 marks).
- With an increase in demand, prices of property will increase
- Limited properties are available which will also drive up costs

Points must be distinctly unique.
(Any THREE valid points)

3.2 Urban Structure, Patterns and Settlement Issues

3.2.1	G
3.2.2	A
3.2.3	E
3.2.4	F
3.2.5	B

3.2.6
- Shelter is classified as a basic human need.
- With an increasing urban population, city areas are in need of more housing.
- Overcrowding, poor-quality, sub-standard homes are social issues within South Africa's urban areas.
- Good quality and affordable housing projects are needed to house lower income families.
- Subsidised and social housing projects provide for more affordable housing opportunities.
- Government needs to support lower-income earners.
- Decrease the development/growth of informal settlements.
- Building the houses created job opportunities.

Credit any relevant point.

3.2.7 Yes, for the following reasons: (*no mark given for yes*)
- Variety of land uses: industrial park, regional shopping mall (commercial), housing (residential)

(Any TWO supporting points, linked to the Fact File)

3.2.8 (a) The Multiple Nuclei Model is based on the idea that cities have **more than one centre** (they have several – hence *multiple nuclei).* More than one CBD/core/business area.

(b) Can agree/disagree as to whether the Borwa Housing project represents Multiple Nuclei model. Answer must show understanding of model in relation to the housing project example.
Representative in that within this housing project area there are commercial, retail and industrial opportunities. This region could represent a multi-nuclei area. Maximum usage of land. Many land uses/functions are accessible.

3.2.9
- Improvement in both access to and quality of accommodation (housing).
- Variety of **new employment opportunities** within the retail sector (shopping mall) and the Industrial park.
- With the housing project, it is likely the **general infrastructure of the area will improve**, e.g. Road systems, pavements, services and amenities, e.g. Water and electricity.
- The Fact File mentions **community facilities** – these could be aspects such as recreational areas, e.g. park, a clinic and a community centre, sports fields, etc.
- Since amenities are nearby, transport costs will reduce.

(Any THREE valid points; listing of single words acceptable if positive/relevant)

3.3 Gold Mining in South Africa

3.3.1 The general trend is that the gold is **contributing less** and less to SA's economy. Has declined, steadily fallen, decreased.

3.3.2
- Expense of deep-level mining (rising input costs).
- Aging infrastructure.
- Increasing concerns and pressures around health, safety and the environment.
- Many mines/resource in general is becoming exhausted; scarcity of mineral.
- Labour issues and frequent strikes; HIV/AIDS.
- Falling gold price on international markets/global economic crisis.
- Disruption to production due to load-shedding and frequent electricity cuts.
- Threats to nationalise mines.
- Disinvestment by large international companies due to above reasons.
- Water restrictions.

(Any 3 valid points)

3.3.3 381 000 – 400 000 (2008–2015)
600 000 – 219 000
= 381 000 Oz

3.3.4
- Cost of mining at a very deep level, hard and compact bedrock.
- Extremely high temperatures at such a deep level (geothermal gradient), limited oxygen at low levels.
- Underground water.
- Health and Safety of mine workers, risk of collapse.
- Electrical costs involved in getting the shaft to such a level.
- Difficulty of getting equipment down to deep levels, need for specialised, deep-level equipment, which is expensive.
- Accident risk increases.

(Any 2 appropriate challenges, to earn full marks, candidate)

3.4 **Port Elizabeth-Uitenhage Industrial Region, Eastern Cape**

3.4.1
- Employment
- Skills development and training
- Foreign investment, attracts other link industries/Multiplier Effect/Agglomeration
- Infrastructure development, investment into the area
- Good exports to foreign markets in Asia and Europe
- Branding/marketing of PE

(Any 3 factors discussed and expanded upon; single words = single marks, max 3)

3.4.2
- Efficient budgeting.
- Exceed various energy consumption, water usage, emissions and wastage targets.
- Good exports to foreign markets.
- Robotic technology and technology is an advantage.
- [Top manufacturing plant is NOT valid, as this is implied in the question.]

3.4.3
- Labour strikes/unrest
- Poorly skilled workforce
- Labour costs, minimum wage
- Crime
- Lack of resources in the area (lack of water, drought)
- Distance to markets
- Load-shedding
- Political instability
- JUNK status

(Any 2 relevant factors)

3.4.4 Quaternary sector

3.4.5 (a)
- Large sections of this area formed a part of the former Transkei area, a former homeland area which would have been **neglected in terms of infrastructure and industrial development** during the apartheid era – hence this area has been identified as a SDI.
- Unique position and natural resources (Fish River – water supply).
- Integration of rural development initiatives and modern approaches to community driven tourism.
- A need to **attract investment** into a once neglected area.
- Attempt to **decentralise industry** from core areas in GP, KZN and WC.
- Area has **huge economic potential** (good climate and soil, coastline, port system, space for development and a labour pool – huge untapped potential in terms of labour).

(Any 2 points discussed)

(b)
- Direct link to the deep water port of Ngqura and two other sea ports namely Port Elizabeth and East London.
- Close to the city of Port Elizabeth – good links via road and rail to a market area and labour supply.
- Good water supply and availability of potable water.
- Good power supply: electrical substations and close to renewable energy – wind farm.
- Available space for development (6443 ha of industrial space).

(Any 2 – reference must be made to the fast facts – factors MUST relate to the geographical position/use of space in relation to the surrounds)

(c)
- Infrastructure development (vast: wind farms, new Ngqura port, road and rail network, services and amenities, etc.)
- Job opportunities and reduction of unemployment.
- Opportunities to train and upskill people, attracted skilled labour into the area
- International investment and interest in the area.
- Increased exports and overall contribution to the GDP

(Any 3, **distinct** relevant points)

Total: 300 marks