



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**GEOGRAPHY P1**

**NOVEMBER 2018**

**MARKING GUIDELINES**

**MARKS: 225**

**These marking guideline consist of 21 pages.**

**SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY****QUESTION 1**

- 1.1 1.1.1 north (1)
- 1.1.2 South Indian (1)
- 1.1.3 ridge (1)
- 1.1.4 1016 hPa (1)
- 1.1.5 10 knots (1)
- 1.1.6 north west (1)
- 1.1.7 Subtropical High (1) (7 x 1) (7)
- 1.2 1.2.1 B (1)
- 1.2.2 Rainfall/Precipitation (1)
- 1.2.3 Headward erosion/Backward erosion (1)
- 1.2.4 A (1)
- 1.2.5 Elbow of capture (1)
- 1.2.6 Wind gap (Dry gap) (1)
- 1.2.7 Misfit Stream (1)
- 1.2.8 B (1) (8 x 1) (8)

- 1.3 1.3.1 Family of cyclones/depressions (1) (1 x 1) (1)
- 1.3.2 It is further east/south/south-east (2)  
Movement is eastwards, therefore **A** is ahead of **B** and **C** (2)  
**[ANY ONE]** (1 x 2) (2)
- 1.3.3 Less moisture causes less/no rainfall (2)  
Warm air from the warm sector is uplifted slowly and more gently (gentle gradient) (creating stratus/altostratus/cirrus and cirrostratus clouds, and causes no rain) (2)  
Softer rainfall from nimbostratus clouds (2)  
**[ANY ONE]** (1 x 2) (2)
- 1.3.4 The cold front catches up to the warm front/two fronts merge (2)  
Warm air is displaced off the earth's surface (occluded)/Occlusion has taken place (2)  
Warm and cold air masses move horizontally past one another again (2)  
**[ANY ONE]** (1 x 2) (2)
- 1.3.5 **Once passed over**  
Lower temperatures as a result of cold air behind the cold front (2)  
Strong winds due to strong pressure gradient (2)  
West to south westerly winds/backing as a result of clockwise spiralling air (2)  
  
Dense cloud cover due to strong uplift of warm air (2)  
Cumulonimbus clouds will result in heavy rainfall/thunderstorms/hail (2)  
Atmospheric pressure will be higher due to the cold, dense air following the cold front (2)  
Decreasing humidity due to cold air being more dense (2)  
Snowfalls may occur as dewpoint temperature is reached below freezing point (2)  
**OR**  
**While approaching**  
Fairly high temperatures will remain as one is still in the warm sector (2)  
Gentle to moderate winds as the pressure gradient is weak (2)  
Northwest to westerly winds as a result of the clockwise spiralling of air (2)  
Low stratus clouds with clear patches as a result of the slow rising air (2)  
Stratus clouds could result in scattered rain (2)  
Atmospheric pressure will be low as a result of the warm, less dense air (2)  
Humidity will be relatively low as warm air is less dense (2)  
**[ANY FOUR. CREDIT CANDIDATE FOR ANY VALID FACTOR GIVEN]**  
(4 x 2) (8)
- 1.4 1.4.1 Katabatic wind (1) (1 x 1) (1)
- 1.4.2 Air temperature increases with height/temperature inversion (1)  
The highest temperature is found mid-slope (1)  
Air temperature is warmer (1)  
Temperature is above freezing (1)  
**[ANY ONE]** (1 x 1) (1)

- 1.4.3 (Temperature) inversion/Valley inversion/Negative lapse rate (1) (1 x 1) (1)
- 1.4.4 Air temperatures are much lower (2)  
Air is heavier and denser (2)  
Increased intensity of downward movement of air/Cold air moves down the slope quickly (2)  
**[ANY TWO]** (2 x 2) (4)
- 1.4.5 Collection of cold, dense air at the bottom of the valley (2)  
Warm air is displaced from the valley floor (2)  
Frost forms on the valley floor (2)  
Gravity causes cold air to drain towards the valley floor (2)  
Dew point temperature below freezing point (2)  
**[ANY TWO]** (2 x 2) (4)
- 1.4.6 Only frost resistant crops can be planted here/Grow fruit with thick resistant skin, e.g. citrus (2)  
Genetically modified seeds adapted for frost conditions (2)  
Torches and fire drums (heating systems) to keep air circulating so that temperatures do not drop below 0 °C/anti-frost heating to protect crops (2)  
Fans to keep air circulating (2)  
Mechanisms to divert subsiding wind (diversion walls) away from crops (2)  
Straw in between crops to reduce terrestrial radiation (mulching) (2)  
Glass houses (greenhouses) can be built to create an artificial micro-climate for sensitive crops (2)  
Cover plants with frost covers (2)  
**[ANY TWO]** (2 x 2) (4)
- 1.5 1.5.1 There are very few tributaries (1)  
Few streams cover a large area (1)  
**[ANY ONE]** (1 x 1) (1)
- 1.5.2 Low/soft rainfall will increase infiltration and decrease run-off (2)  
Gentle gradient will increase infiltration and decrease run-off (2)  
More vegetation cover will increase infiltration and decrease run-off (2)  
Permeable soil will increase infiltration and decrease run-off (2)  
Porous rock will increase infiltration and decrease run-off (2)  
Drier soil will increase infiltration and decrease run-off (2)  
High evaporation rate reduces water available for surface run-off (2)  
Little development therefore few artificial surfaces to prevent infiltration (2)  
Low rainfall will result in fewer streams (2)  
**[ANY TWO]** (2 x 2) (4)
- 1.5.3 There will be more first order streams/fingertip streams (2)  
The order of subsequent streams will increase (2)  
Stream order at A will increase (2)  
3<sup>rd</sup> order to higher order (2)  
**[ANY ONE]** (1 x 2) (2)
- 1.5.4 Clearing of natural vegetation/deforestation will increase run-off (2)  
Overgrazing by animals removes natural vegetation which increases run-off (2)  
Incorrect ploughing methods can result in more water flowing down the furrows (2)  
Over-cultivation of farmland destroys vegetation and top soil (2)

The loss of topsoil due to human activities can result in the formation of gullies (dongas) (2)  
 Building of settlements increases artificial surfaces therefore more run-off (2)  
 Building of canals to divert run-off create more river channels (2)  
 Building of roads reduces natural vegetation which increases run-off (2)  
 Open cast mining causes removal of natural vegetation increasing run-off (2)  
 Trampling of soil by livestock decreases infiltration (2)

**[ANY FOUR. CANDIDATE MUST INDICATE HOW THE FACTOR RESULTED IN A HIGHER DRAINAGE DENSITY]** (4 x 2) (8)

- 1.6 1.6.1 Upper course (1) (1 x 1) (1)
- 1.6.2 Width/Breadth (1)  
 Depth (1)  
 Shape (1)  
 Heights of interfluvies change (1)  
**[ANY TWO. ACCEPT DESCRIPTION OR MEASUREMENTS]** (2 x 1) (2)
- 1.6.3 In the upper course vertical/downward erosion takes place (2)  
 In the lower course deposition/lateral erosion takes place (2) (2 x 2) (4)
- 1.6.4 (Increased) lateral erosion/(decreased) downward erosion results in a river valley widening (2)  
 Sheet flow down the valley slopes will result in the lowering of the slopes (2)  
 River slows down in the middle course causing deposition which decreases the depth of the valley (2)  
 More gentle gradient in the middle course causing deposition which decreases the depth of the valley (2)  
 Meandering river will widen the valley floor (2)  
 Where the river exits the confines of the mountain, the river valley will be wider (2)  
 Greater volume of water and lower velocity will increase lateral erosion in the middle course (2)  
**[ANY TWO]** (2 x 2) (4)
- 1.6.5 In the upper course of the river the valley is narrow (2)  
 Cost of construction of the dam wall will be cheaper (2)  
 The rocky banks will make the structure stronger (2)  
 The dam will be deeper because of the deep valley (2)  
 Cooler temperatures at higher altitude, therefore less evaporation (2)  
 Smaller water surface area reduces evaporation rates (2)  
 A deeper dam will have an increased capacity (2)  
 Less silt in the dam as there are fewer tributaries that enter the dam (2)  
 Steepness of slope allows easy flow of water into a dam (2)  
**[ANY TWO]** (2 x 2) (4)

**[75]**

**QUESTION 2**

- 2.1 2.1.1 Eye (1)
- 2.1.2 Low (1)
- 2.1.3 Heavy (1)
- 2.1.4 Updraughts (1)
- 2.1.5 Diverging (1)
- 2.1.6 High (1)
- 2.1.7 Pressure (1)
- 2.1.8 Wind Speed (1) (8 x 1) (8)
- 2.2 2.2.1 E (Floodplain) (1)
- 2.2.2 G (Levee) (1)
- 2.2.3 C (Meander) (1)
- 2.2.4 F (Oxbow Lake) (1)
- 2.2.5 D (Braided stream) (1)
- 2.2.6 H (Waterfall) (1)
- 2.2.7 B (Delta) (1) (7 x 1) (7)
- 2.3 2.3.1 Moisture front (1) (1 x 1) (1)
- 2.3.2 A band of cloud stretching from the NW to the SE of the country (2)  
(Cumulonimbus) clouds arranged in a line from the NW to the SE (2)  
Converging air masses over the interior of the country (2)  
Presence of the moisture front (2)  
**[ANY ONE]** (1 x 2) (2)
- 2.3.3 Low pressures over the land during summer, draw in moisture off the oceans onto the land (2)  
Inversion layer above escarpment in summer allows inflow of moist air (2)  
Increased convergence of air masses from well-developed high-pressure cells along the coast (2)  
Weakened Kalahari High Pressure Cell facilitates greater vertical rising of air above the interior (2)  
Presence of trough over the interior during summer (2)  
**[ANY ONE]** (1 x 2) (2)
- 2.3.4 Warm moist air from above the Indian Ocean/Warm Mozambique/Warm Agulhas Current (2)  
Warm moist tropical air diverging from the South Indian High Pressure Cell (2)  
Warm moist air from the North-easterly winds (2)  
**[ANY ONE]** (1 x 2) (2)

- 2.3.5 Warm moist air from the east (more moisture) reaches the interior (2)  
Cold dry dense air from the west forces warm moist less dense air to rise (2)  
Air on the eastern side is more unstable (2)  
Large scale condensation results in dense cloud formation (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.3.6 Has a longer duration (2)  
They cover a greater/widespread area (2)  
Damage is more widespread (2)  
Continuous feeding of moisture from the ocean (2)  
Constant formation of cumulonimbus clouds along the moisture front (2)  
Stronger upliftment/rapid rising and condensation along the moisture front (2)  
Torrential or heavy rainfall and/or hail (2)  
Occurs any time of day (2)  
**OR**  
Has a much shorter duration (2)  
Isolated thunderstorms are over a small area (2)  
Isolated thunderstorms will result in damage that is not widespread (2)  
Isolated thunderstorms do not have a continuous source of moisture (2)  
Only occurs during late afternoon (2)  
**[ANY TWO. CANNOT REFER TO THE SAME FACTOR ON BOTH SIDES]**  
(2 x 2) (4)
- 2.4 2.4.1 An accumulation of dust, soot and smoke (pollution) particles over the city (1)  
**[CONCEPT]** (1 x 1) (1)
- 2.4.2 Urban areas produce more pollution/combustion released by cars, industries and other activities/More human activities (2)  
(1 x 2) (2)
- 2.4.3 During the night subsidence is stronger/trapped closer to the ground/  
inversion layer is closer to the surface at night (2)  
Less activity resulting in heat generation to lift pollution dome (2)  
Pollution covers a smaller area (2)  
Less convection/thermal currents to distribute pollution at night (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.4.4 Soot accumulation on buildings results in more cleaning services needed (2)  
Results in acid rain which results in peeling of paint of buildings (2)  
Buildings must be painted more often (2)  
Concrete surfaces become pitted (holes) and must be maintained/renovated more frequently (2)  
Metal structures such as metal window frames/air conditioners become corroded because of the acid rain/renovated more often (2)  
Replacing damaged material with good quality/durable material is costly (2)  
Regular replacement/purchase of air conditioner filters (2)  
More regular painting of road markings as acid rain makes it peel easier (2)  
High pollution results in higher rainfall and can cause flood damage (2)  
Damaged plants in gardens to be replaced (2)  
Water reservoirs/dams become polluted and money spent to purify water (2)  
**[ANY FOUR]** (4 x 2) (8)

- 2.5 2.5.1 When a river is eroding the landscape downwards in response to a lowering/change of its base level (1)  
River rejuvenation is a process where rivers (are re-energised to) actively erode downward again (1)  
**[CONCEPT]** (1 x 1) (1)
- 2.5.2 A drop in the sea level (1) (1 x 1) (1)
- 2.5.3 Waterfall/rapids (1) (1 x 1) (1)
- 2.5.4 Rejuvenated rivers will be ungraded/obstructions along the course as a result of renewed downward erosion (2)  
River will now show a multi-concave profile (2)  
Temporary base levels of erosion will develop (examples: knickpoint, rapids, waterfall) (2)  
Overgraded river as renewed downward erosion now takes place (2)  
Vertical erosion downstream of the knickpoint dominates (2)  
The balance between erosion and deposition is disturbed (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.5.5 Knickpoints can form because of the old erosion level meeting the new erosion levels (2)  
The knickpoint retreats upstream (2)  
Waterfall can form at the knickpoint due to the break/lowering along the course of the river (2)  
Waterfalls can turn into rapids (2)  
Meanders will become more incised and entrenched (erode vertically) (2)  
River cuts into the flood plain and a new flood plain develops (2)  
A valley within a valley forms because of vertical erosion (2)  
Valleys with multi-terraced slopes will form (2)  
River channel becomes narrower (2)  
New floodplain is narrower than the original flood plain (2)  
More meanders develop (2)  
**[ANY FOUR]** (4 x 2) (8)
- 2.6 2.6.1 Deforestation is the removal of trees/natural vegetation/Cutting down of trees quicker than it can be replaced (1)  
**[CONCEPT]** (1 x 1) (1)
- 2.6.2 (a) 2050 (1) (1 x 1) (1)
- (b) KwaZulu-Natal/KZN (1) (1 x 1) (1)

- 2.6.3 Decreased carrying capacity (2)  
 River blockage (2)  
 Reduce water quality (2)  
 Rivers/dams become shallower (2)  
 Increases the stream load (2)  
 Disrupt ecosystem of the river (2)  
 Disrupt biodiversity in a river (2)  
 Increased flooding of river system (2)  
 Less infiltration (2)  
 Decrease in groundwater levels (2)  
 Reduction in base flow (2)  
 More evaporation dries soil out (2)  
 Greater erosion along river banks (2)  
 Lowering of levees (2)  
 More polluting of the rivers and eutrophication (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.6.4 Legislation to protect areas that are prone to deforestation (2)  
 Fines to those who illegally remove trees (2)  
 Implement more afforestation within the river system (2)  
 Create awareness of the negative impacts of deforestation (2)  
 Educate people on the importance of good river management systems (2)  
 Promote conservation and establish more protected areas to prevent deforestation (2)  
 Create a buffer zone for protection of natural forests (2)  
 Protect river banks from deforestation (2)  
 Rehabilitation of forests/afforestation (2)  
 Encourage recycling to reduce deforestation (2)  
**[ANY TWO]** (2 x 2) (4)
- 2.6.5 Poor river management will result in less water being available (2)  
 Poor quality of the water will result in higher purification costs (2)  
 Water is unsafe for human consumption (2)  
 Increased siltation of dams will compromise water quality (2)  
 Shortage of good quality water would make it more expensive (2)  
 More run-off reduces groundwater supply (2)  
 Expensive to implement inter-basin water transfer schemes (2)  
 Less water for domestic, industrial and agricultural use (2)  
**[ANY TWO]** (2 x 2) (4)
- [75]**

**SECTION B: RURAL AND URBAN SETTLEMENTS AND ECONOMIC GEOGRAPHY OF SOUTH AFRICA****QUESTION 3**

- 3.1 3.1.1 Linear (1)
- 3.1.2 Stellar (1)
- 3.1.3 Semi-circular/Linear (1)
- 3.1.4 Circular (1)
- 3.1.5 Nucleated (1)
- 3.1.6 Cross-shaped (1)
- 3.1.7 Dispersed (1)
- 3.1.8 T-shaped (1) (8 x 1) (8)
- 3.2 3.2.1 B (GDP) (1)
- 3.2.2 D (Finance, real estate and business services) (1)
- 3.2.3 B (Electricity, gas and water) (1)
- 3.2.4 D (Agriculture, forestry and fishing) (1)
- 3.2.5 B (Manufacturing) (1)
- 3.2.6 C (Electricity, gas and water) (1)
- 3.2.7 C (77%) (1) (7 x 1) (7)
- 3.3 3.3.1 A process whereby an increasing percentage of people live in urban areas (1)  
**[CONCEPT]** (1 x 1) (1)
- 3.3.2 As the rate of urbanisation increases the level of urbanisation increases (2)  
It is a directly proportional relationship (2)  
**[ANY ONE]** (1 x 2) (2)

- 3.3.3 Drought frequency in rural areas increases rural-urban migration (2)  
 Flood frequency destroy crops causing people to leave rural areas (2)  
 Stronger El Niño increases droughts and/or floods (2)  
 Soil erosion decreases production on farm lands forcing people to leave (decrease in soil fertility/desertification) (2)  
 Stock/crop diseases/pests and stock losses/decreases in crop yields forces farmers to abandon farm lands and move to urban areas (2)  
 Adverse weather conditions e.g. hail storms destroy crops and this negatively affects production and leads to decreased profits (2)  
**[ANY TWO. LISTING ALONE CANNOT BE ACCEPTED – MUST BE QUALIFIED]** (2 x 2) (4)

- 3.3.4 Urbanisation (percentage increase of people) has increased the demand for housing in urban areas (2)  
 The inability of the local government to meet this demand has led to protest actions (2)  
 Lack of planning from the local government to meet demands for services (2)  
 Lack of services (electricity, water, sanitation) in informal settlements and people are not happy about this (2)  
 Unreliable service delivery impacts on daily activities (2)  
 Services are not properly maintained, therefore quality deteriorates (2)  
 Urbanisation increased unemployment rates which has frustrated people (2)  
 There is an increased demand on services such as clinics and hospitals reducing accessibility for people (2)  
 Traffic congestion as there are not enough roads/unmaintained roads (2)  
 Lack of space in schools due to high population numbers (2)  
 Protest due to forced removals and demolition of informal settlements which leaves people without shelter (2)  
 Protests due to lack of land ownership and access to land (2)  
 Protests due to competition with foreigners for houses and employment (2)  
 People are unhappy about nepotism and corruption which is preventing them from accessing government services e.g. housing (2)  
**[ANY FOUR. REASONS FOR PROTEST ACTIONS MUST BE GIVEN]** (4 x 2) (8)

- 3.4 3.4.1 The rural-urban fringe is the boundary/transition between the urban edge and the rural periphery where rural and urban functions are mixed (1)  
**[CONCEPT]** (1 x 1) (1)

- 3.4.2 Landing strip (1)  
 Large shopping centre (1)  
 Gated communities (1)  
 Out of town theme park (1)  
 High-tech industrial (1)  
 Industrial park (1)  
 Industrial zone (1)  
 Planned housing developments (1)  
**[ANY TWO]** (2 x 1) (2)

- 3.4.3 Urban sprawl reduces the extent of the rural-urban fringe (2)  
 Cheaper land in the rural-urban fringe makes it lucrative for development (2)  
 Increase in world urban population (2)  
 Improved technologies allow people to live further from urban areas (2)  
 People prefer/afford to commute to urban areas (2)  
 Peaceful environments/larger properties/less pollution/aesthetically pleasing (2)
- Counter-urbanisation is encouraged (2)  
 Development of infrastructure/roads increase accessibility/less congested (2)  
 Decentralisation of businesses (2)  
 Sought after location is a pull factor (2)  
 Higher standard of living allows people to commute over longer distances (2)  
**[ANY TWO]** (2 x 2) (4)
- 3.4.4 Cheaper land is ideal as large areas are required (2)  
 Land values lower in the periphery for development (2)  
 More space required for multifunctional purposes (2)  
 Rural atmosphere creates a more tranquil/peaceful lifestyle (2)  
 Away from polluted urban areas (2)  
 Aesthetic beauty (2)  
 Usually built around golf courses/recreational areas/parks (2)  
 Can still commute to urban areas without travelling a great distance (2)  
 Greater sense of security/less crime (2)  
 Provision of amenities/services within the gated community (2)  
 More flexible bylaws/development freedom (2)  
**[ANY TWO]** (2 x 2) (4)
- 3.4.5 Encroachment on farming land (2)  
 Job losses amongst farm workers (2)  
 Food insecurity may increase (2)  
 Increased deforestation (2)  
 Destroys ecosystems (2)  
 Reduces biodiversity (2)  
 Change in the local climate (2)  
 Loss of aesthetic appeal/tranquillity (2)  
 Urban sprawl/uncontrolled urban expansion/rural and urban functions mix (2)  
 Re-zoning of land use (2)  
 Conflict between municipality and traditional leaders/land earmarked for land reform (2)  
 Increase in land values (2)  
 Exclude the poor from access to land/forced removals (2)  
 Inadequate compensation for land required for development (2)  
 Existing services will be put under pressure (2)  
 Increased waste disposal/land pollution/air pollution (2)  
 Increased traffic congestion (2)  
 Potential increase in crime (2)  
**[ANY TWO]** (2 x 2) (4)

- 3.5 3.5.1 Brazil (1) (1 x 1) (1)
- 3.5.2 'South Africa became a net red meat exporter for the first time' (1) (1 x 1) (1)
- 3.5.3 (a) Make less money as poor quality beef does not fetch high prices (1)  
Countries buy less as a result of poor quality (1)  
**[ANY ONE]** (1 x 1) (1)
- (b) Improved breeding programmes/research will increase the quality of the beef (2)  
Prevent overstocking/Do not exceed carrying capacity (2)  
Industrial beef cattle farming (2)  
Regular vaccination to prevent diseases (2)  
Regular health checks of cattle (2)  
Free range farming improves quality of beef (2)  
Genetically modified species/scientific methods to improve stock yields (2)  
Increase education and skills of farmers/research and development (2)  
More agricultural officers to educate small scale and new farmers (2)  
Access to funding to improve mechanisation and technology (2)  
Government subsidies and grants will improve processing techniques (2)  
Accelerate the process of land reform (2)  
Improved pasturage and feeding will result in healthier cattle (2)  
**[ANY TWO]** (2 x 2) (4)
- 3.5.4 Water shortages reduces stock numbers (2)  
Regular droughts reduce the amount and quality of stock for export markets (2)  
Small-scale (subsistence or commercial) farming can result in less production for markets (2)  
Commercial farmers abandon their farms and beef production decreases (2)  
A huge demand for beef within South Africa decreases exports (2)  
Low government subsidies push up prices (2)  
Large distances to overseas markets increases the costs of exportation (2)  
Expensive to refrigerate beef products during transportation (2)  
Cattle diseases e.g. foot and mouth/mad cow disease reduces meat availability for export markets (2)  
Low quality of natural grazing reduces the amount of stock (2)  
Unclear land reform policies slows down beef production while outcomes are awaiting (2)  
Stock theft reduces the amount of stock (2)  
Increased cost of fodder during drought/winter results in beef farmers reducing stock numbers (2)  
Veld fires reduce natural grazing and therefore stock (2)  
Medication against diseases expensive and increase farming costs (2)  
Poor exchange rate reduces profits for beef farmers (2)  
Price fluctuations reduce profit (2)
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Increase in production costs (machinery/labour) reduces stock numbers and profits (2)  
 Trade barriers discourage cattle farming (2)  
 Youth do not pursue farming/Loss of skilled farmers therefore beef production is low (2)  
 Lack of scientific breeding methods keeps beef production low (2)  
 Limited beef processing plants limits the export of beef products (2)  
 Traditionally cattle is regarded as a symbol of wealth and subsistence farmers are reluctant to sell their cattle (2)  
 Small-scale farmers cannot access loans from banks and cannot afford the increasing production costs (2)

**[ANY FOUR]** (4 x 2) (8)

3.6 3.6.1 Eastern Cape (1) (1 x 1) (1)

3.6.2 Investments worth R1.3 billion (1)  
 Job creation (1)  
 Increased exports (1)  
 Foreign income earned (1)  
 Export-orientated manufacturing (1)  
**[ANY TWO]** (2 x 1) (2)

3.6.3 Harbour was upgraded (2)  
 Upgrading of rail network (2)  
 New roads were built (2)  
 Existing roads were upgraded (2)  
 Airport facilities were upgraded (2)  
 Improved communication networks (2)  
 Improved electricity distribution grids (2)  
 More emphasis on renewable/green energy (2)  
 Improve supply and accessibility to water (2)  
 Upgrading of the built environment (2)  
**[ANY TWO]** (2 x 2) (4)

3.6.4 Fully developed stands at cheaper rate (2)  
 Provide fully developed infrastructure (2)  
 Tax rebates (2)  
 Duty-free imports (2)  
 Zero rate on VAT for all suppliers procured in South Africa (2)  
 Zone specific local incentive packages (2)  
 Discounted utility services e.g. electricity (2)  
 Relocation rebates (2)  
 Provincial subsidised training of workforce (2)  
 Housing for employees (2)  
 Transport rebates (2)  
**[ANY TWO]** (2 x 2) (4)

- 3.6.5 Higher revenue for exported manufactured products (2)  
Sell larger volumes in the international market, therefore more profit (2)  
Multiplier Effect – will lead to new industrial development, thus promotes the growth of the industrial sector (2)  
Higher profits due to a more favourable foreign exchange rates (2)  
Exportation will bring more foreign currency into the country (2)  
Greater contribution to the GDP (2)  
More job creation improves local trading markets (2)  
Higher income per capita for ELIDZ improves the provincial fiscal treasury (2)  
Standard of living in the Eastern Cape improves because more people are gainfully employed in skilled, semi-skilled and unskilled activities (2)  
Improved infrastructure and transport networks benefits trade (2)
- [ANY TWO]** (2 x 2) (4)  
**[75]**

**QUESTION 4**

- 4.1 4.1.1 A/gridiron (1)
- 4.1.2 B/radial concentric/cobweb (1)
- 4.1.3 A/gridiron (1)
- 4.1.4 B/radial concentric/cobweb (1)
- 4.1.5 C/irregular (1)
- 4.1.6 A/gridiron (1)
- 4.1.7 C/irregular (1) (7 x 1) (7)
- 4.2 4.2.1 Gauteng (1)
- 4.2.2 West Wits Operations (1)
- 4.2.3 Anglo Gold Ashanti (1)
- 4.2.4 China (1)
- 4.2.5 7th (1)
- 4.2.6  $140 + 90 = 230\text{mt}$  (1)
- 4.2.7 2014 (1)
- 4.2.8 Decreasing (1) (8 x 1) (8)
- 4.3 4.3.1 Taxis/Minibus taxis (1) (1 x 1) (1)
- 4.3.2 High cost for poor service delivery/no value for money (1)  
Higher costs when other transport not available (1)  
No operational licences issued/unregulated (1)  
During strikes commuters cannot get to work/loss of salary/productivity (1)  
Reckless driving puts strain on Road Accident Fund (1)  
Do not pay taxes (1)  
**[ANY ONE]** (1 x 1) (1)
- 4.3.3 Taxi associations were closed down (by the Minister of Transport) (1)  
(1 x 1) (1)

- 4.3.4 People can't afford to own their own private vehicles/Too poor to afford own transport (2)  
Taxis are cheaper than some other public transport systems (2)  
People live far from their place of work and taxis are quicker (2)  
Accessibility and convenience of taxis from home to place of work (2)  
Other public transport systems are unreliable (2)  
Taxis are more flexible in their routes and stops (2)  
Historical reliance on taxis (2)  
Increase in toll roads (2)  
Increase in petrol prices (2)  
**[ANY TWO]** (2 x 2) (4)
- 4.3.5 They are going to lose money as a result of less commuters (2)  
Competition is not good for the taxi business (2)  
They will reduce their daily share of business/afraid of losing the market (2)  
Taxi drivers can lose their jobs (2)  
**[ANY TWO]** (2 x 2) (4)
- 4.3.6 Regulate the taxi industry/taxi ranks through legislation (2)  
Regulate the private service providers like Uber and Taxify (2)  
Bring together the various transport providers, to foster healthy competition, and to work together in peace and harmony (2)  
More vigilance from government in policing/monitoring taxi associations (2)  
The Minister of Transport/Police can close specific problematic routes (2)  
Possible allocation of different routes to associations (2)  
Effective prosecution of those who incite violence within the taxi industry (2)  
Educating operators (imbizos) on responsibilities (2)  
More monitoring by traffic officers (2)  
Issue more operational licences where there is a demand (2)  
Shut down taxi routes for a period of time during the day (2)  
Implementing card systems to regulate operational routes within the taxi industry (2)  
**[ANY TWO]** (2 x 2) (4)
- 4.4 4.4.1 Wheelbarrows/donkey carts/on their heads/buckets/drums/bottles/ (1)  
**[ANY ONE]** (1 x 1) (1)
- 4.4.2 Transportation of water is easier/more accessible (2)  
It saves time to fetch the water (2)  
More water can be collected therefore fewer trips (2)  
Enclosed container therefore less water losses (2)  
Enclosed container therefore fresher water (2)  
**[ANY ONE]** (1 x 2) (2)

- 4.4.3 Increase agricultural production/assists subsistence farmers (2)  
Sustainable farming (2)  
Higher profits (2)  
Spent less time on collecting water, therefore more time for schooling (2)  
Increased employment/generates income (2)  
Reduces burden of time and volume required to improving the standard of living and economic viability (2)  
Development of home industries (2)  
**[ANY ONE]** (1 x 2) (2)
- 4.4.4 Apartheid legacy of access to water in rural areas (2)  
Lack of funding for improved infrastructure (2)  
Not economically viable in sparsely populated areas (2)  
Lack of planning and development in rural areas (2)  
Population increase faster than infrastructure development (2)  
Poor maintenance of existing infrastructure network (2)  
Mismanagement of funds (corruption) by the government (2)  
Boreholes not accessible/privately owned (2)  
Theft of water infrastructure (2)  
Not enough qualified people to maintain water infrastructure (2)  
Focus placed on urban areas and industrial development (2)  
Diversion of water resources (2)  
Poor/cheap quality materials used to maintain water infrastructure (2)  
**[ANY ONE]** (1 x 2) (2)
- 4.4.5 The infrastructure needs to be developed for piped water to homes (2)  
Build/upgrade more dams to store water (2)  
Install more Jo-Jo tanks to harvest and store water (2)  
Digging of more boreholes to tap into groundwater sources (2)  
Encouraging the recycling of grey water prevents wastage (2)  
Filtration of polluted water (2)  
Reversed osmosis to produce clean water (2)  
Government allocating more funds to secure clean water (2)  
Utilise inter-basin water transfer schemes where there is a lack of water (2)  
Upgrading and maintenance of existing water network systems (2)  
Education in the wise usage of water (2)  
Improved farming practices to promote infiltration (2)  
Use organic fertilisers to prevent pollution of water (2)  
Improve catchment management systems (2)  
Recharge aquifers to maintain groundwater volumes (2)  
Remove alien/exotic vegetation to reduce the usage of water (2)  
Improved irrigation techniques to save water (2)  
Subsidising of the Wello water wheel (2)  
**[ANY FOUR]** (4 x 2) (8)

- 4.5 4.5.1 '... contributing nearly 35% to the national gross domestic product, until at least 2017' (1)  
' ... produced more than 50% of South Africa's manufactured exports' (1)  
**[ANY ONE]** (1 x 1) (1)
- 4.5.2 Good energy security secures uninterrupted energy supply (2)  
Many skilled/unskilled labourers ensure a high level of productivity (2)  
Capital and technology to maintain high levels of production (2)  
Wide variety of raw materials to support industrial development (2)  
Well-developed transport system to transport raw materials/goods (2)  
OR Tambo provides access to international investors (2)  
A well-developed infrastructure providing essential services (2)  
Wide variety of established secondary and tertiary industries (2)  
Johannesburg Security Exchange (JSE) is located in the PWV/Gauteng (2)  
Commercial and economic hub of South Africa (2)  
Dense/large population creates readily available market/higher purchasing power (2)  
Flat land facilitates the development of new industries (2)  
Access to water resources is more favourable (2)  
**[ANY ONE]** (1 x 2) (2)
- 4.5.3 (a) Abundance of copper mined there (2)  
Close proximity to PWV/Gauteng Industrial Region (2)  
Accessibility via roads/railways (2)  
Saving on transport costs (2)  
**[ANY ONE]** (1 x 2) (2)
- (b) Attracts more investors to the region (2)  
Creates more employment opportunities (2)  
Entrepreneurial skills are improved (2)  
Skills transfer from Gauteng (2)  
Creates a stable labour force (2)  
Strengthens buying power (2)  
Ready market for the copper industries (2)  
Linked industries will be improved/developed (2)  
Multiplier effect leads to the expansion of other industries (2)  
Improved transport links could assist Phalaborwa to export through Gauteng (2)  
Infrastructural improvement and development to ensure rail/road transport of copper (2)  
Social responsibility programs of copper mines will uplift local communities (2)  
Supports a higher standard of living for local communities (2)  
Funds generated will stimulate further development (2)  
**[ANY ONE]** (1 x 2) (2)

**4.5.4 Energy provision**

- Over reliance on coal as a source of energy (2)
- Coal is a non-renewable resource (2)
- Coal is an unsustainable resource (2)
- Negative environmental impact of coal (2)
- Rising costs of energy (2)
- Overload on ESKOM grid that cannot cope with demand (2)
- Power cuts/load shedding affect productivity (2)
- Unreliable power network (2)
- Theft of power cables disrupt power provision (2)
- Corruption in the coal mining sector hampers productivity (2)

**Labour**

- Importing skills will be expensive and increase the costs of production (2)
- Expensive to train labourers (2)
- Disputes and industrial action/strikes will reduce productivity (2)
- Brain drain, where valuable skilled people leaving South Africa (2)
- Impact of illnesses/diseases lower productivity (2)
- Challenges associated with the provision of minimum wages (2)
- Mechanisation could lead to unemployment in the future (2)

**[ANY FOUR]** (4 x 2) (8)

- 4.6 4.6.1 The trade between various countries/The exchange of capital, goods and services between countries (1)
- [CONCEPT]** (1 x 1) (1)
- 4.6.2 Poultry/chicken/chicken products (1) (1 x 1) (1)
- 4.6.3 DTI (Department of Trade and Industry) (1 x 1) (1)
- 4.6.4 The chicken representing cheap imports is larger (and stronger) than the chicken representing the local producers which is smaller (weaker) (2)
- Cheaper imports will outweigh the local producers (2)
  - Local producers will be forced to shut down (2)
  - Job losses and retrenchments may occur (2)
  - Profits decline for local producers (2)
  - Money flows out of the country (2)
  - DTI biased toward cheap imports (2)
  - Imports are subsidised therefore cheaper (2)
- [ANY ONE]** (1 x 2) (2)
- 4.6.5 Negative balance of trade (2)
- Cheaper imports means less profit for local producers (2)
  - Less products produced in South Africa (2)
  - Less profits generated in South Africa (2)
  - Local companies close down (2)
  - Higher unemployment (2)
  - Local producers cannot compete with imports (2)
  - Smaller markets for local producers (2)
- [ANY ONE]** (1 x 2) (2)

- 4.6.6 South Africa belongs to trading blocs/agreements/free trade zones (e.g. BRICS, SADC, AGOA) (2)  
 Access to a larger international market creates more competition for local markets and pricing (2)  
 Fosters better international relations between countries (2)  
 Access to a larger variety of goods (2)  
 More competitive prices for goods purchased (2)  
 Access to cheaper goods means more spending power for the poor to buy other goods (2)  
 Access to cheaper food contributes to food security (2)  
 Political corruption and manipulation (2)  
**[ANY TWO]** (2 x 2) (4)
- 4.6.7 Advertising campaigns/trade fairs such as promote 'local is lekker', 'made in South Africa' (2)  
 Incentives for local industrialists (2)  
 Provide funding to get subsidies to business (2)  
 Provide funding to get grants to farmers (2)  
 Provide funding to get rebates to farmers (2)  
 Provide training programs to up skill locals (2)  
 Use modern technology in farming to increase outputs (2)  
 Encourage import substitution (2)  
 Produce high quality products locally (2)  
 Protectionism/increase import tariffs/decrease quotas(2)  
 Attract foreign investments for local production (2)  
**[ANY TWO]** (2 x 2) (4)  
**[75]**
- GRAND TOTAL: 225**