KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

CURRICULUM GRADE 10 -12 DIRECTORATE

NCS (CAPS) SUPPORT

JUST IN TIME TEACHER DOCUMENT

GEOGRAPHY PAPER 1

GRADE 12

2024

PREAMBLE

This support document serves to assist Geography Grade 12 learners in dealing with curriculum content gaps and learning losses. Activities serve as a guide on how various topics are assessed at different cognitive levels and prepare learners for informal and formal tasks in Geography.

1.1

1.1.1 B (1)
1.1.2 B (1)
1.1.3 C (1)
1.1.4 D (1)
1.1.5 C (1)
1.1.6 B (1)
1.1.7 A (1)
1.1.8 A (1)

(8 x 1) (8)

1.1

1.2.1 Very little cloud cover over the land. (1)
Clear skies. (1)
Date is 22 July which is winter month. (1) (1 x 1) (1)

1.2.2 All pressure systems move north with the apparent movement of the sun. (2)
Northward movement of the ITCZ. (2)
Mid-latitude cyclones migrate northward with the pressure belts. (2)
[ANY ONE]
(1 x 2) (2)

1.2.3

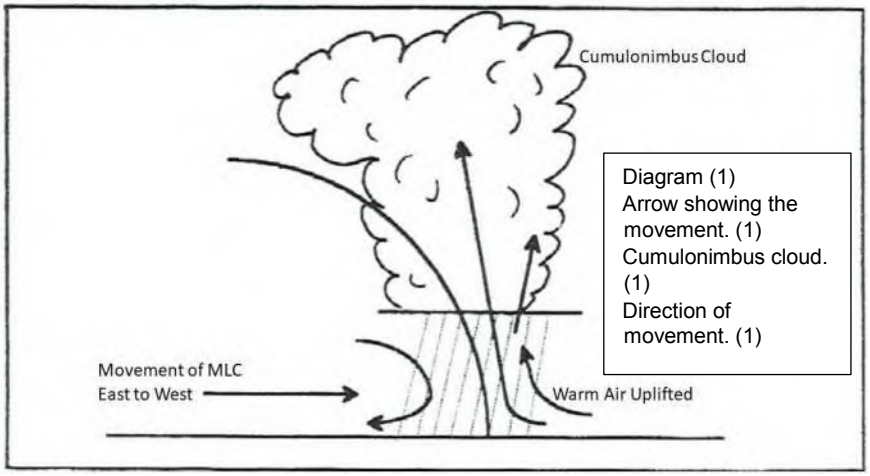


Diagram (1)
Arrow showing the movement. (1)
Cumulonimbus cloud. (1)
Direction of movement. (1)

(4)
(4 x 1)

1.2.4 Drop in temperature because of cold front. (2)
Increase in pressure because cold air is heavy. (2)
Thunderstorms because of massive cumulonimbus clouds. (2)
Decrease in humidity because cold air does not have much moisture. (2)
Winds are strong and gusty and they back because of the clockwise movement of the cyclone. (2)
[ANY THREE]
(3 x 2) (6)
[13]

1.3

1.3.1 Isobars closely spaced together (1)
Steep pressure gradient (1)
Station models show high wind speed (1) (1 x 1)

	[ANY ONE] (1)		(1)
1.3.2	Temperatures will decrease/drop (1) Air pressure will increase/rise (1)	(2 x 1)	(2)
1.3.3	Cold air undercuts the warm air, forcing it to rise rapidly and (very) high (2) Steep gradient of the cold front forces warm air to rise (very) high (2) [ANY ONE]	(1 x 2)	(2)
1.3.4	Issue early warning systems (2) Evacuate people living on flood plains or low-lying areas (2) People should avoid travelling and stay indoors (2) Place sandbags on the bags of rivers (2) Clean/maintain storm water drains to reduce flooding (2) Emergency services /personal to be on standby (2) Trim/ maintain trees to prevent branches of trees causing any damages (2) [ANY FOUR]	(2 x 2)	(4)
1.3.5	Residents should stay indoors/delay travelling/seek shelter (2) People living in low-lying areas should vacate their homes and seek shelter on higher ground (2) NGOs and shelters can provide homeless people with shelter/blankets (2) People can stock up on food/water/candles (2) Stock up on medical supplies (2) People engaged in livestock farming make provisions to shelter livestock (2) Secure belongings/property (2) Boarding up windows (2) Placing sandbags (2) Maintenance of electricity connections (2) Maintain drainage systems (2) Secure boats and vessels in harbours (2) Listen to media broadcasts to prepare for storm (2) Having generators on standby (2) Evacuation plans in place (2) [ANY THREE]	(3 x 2)	(6)
			[15]
1.4			
1.4.1	6 and 9 April (1)	(1 x 1)	(1)
1.4.2	Cold (1), wet (1) and windy weather (1) [ANY TWO]	(2 x 1)	(2)
1.4.3	There is a gentle gradient at B that result in the formation of stratus clouds and hence lighter rain. (2) Cumulonimbus clouds cause heavy rainfall while stratus clouds cause light rainfall. (2) [ANY ONE]	(1 x 2)	(2)
1.4.4	The warm front symbol has developed at the apex. (2)	(1 x 2)	(2)
1.4.5	The warm air undercut the cold front. (2) The coldest air is found ahead of the warm front. (2)	(2 x 2)	(4)

1.4.6	Heavy rain will result in flooding of informal settlements. (2) Heavy rain will wash away roads. (2) Heavy rain will cause informal settlements to become inaccessible. (2) Flooding will cause mudslides/landslides. (2) Strong winds (gale force) will destroy informal structures. (2) [ANY TWO]	(2 x 2)	(4)
			[15]
1.5			
1.5.1	B (1)		
1.5.2	A (1)		
1.5.3	B (1)		
1.5.4	C (1)		
1.5.5	B (1)		
1.5.6	B (1)		
1.5.7	A (1)		
1.5.8	C (1)		
		(8 x 1)	(8)
1.6			
1.6.1	Tropical Cyclone (1)		
1.6.2	Summer (1)		
1.6.3	Tropical Easterlies (1)		
1.6.4	Mauritius (1)		
1.6.5	4 cyclones (1)		
1.6.6	Cumulonimbus (1)		
1.6.7	Southern hemisphere (1)		
		(7 x 1)	(7)
1.7			
1.7.1	Made landfall on Mozambique. (1) The date indicated summer. (1) Map shows Mozambique. (1) South Westerly movement. (1)	(1 x 1)	(1)
1.7.2	Strong winds up to 150km/h. (1) Heavy rainfall up to 500mm in 24 hours. (1)	(2 x 1)	(2)
1.7.3	Gained energy from the warm Mozambique Current. (1) Movement over the warm Mozambique Channel/ocean. (1) Less friction over warm Mozambique channel/ocean. (1) High temperatures/warm oceans results in the release of latent heat. (1) Latent heat drives the systems and increases the wind speed. (1)	(2 x 1)	(2)
1.7.4	Heavy rainfalls result to soil erosion. (2) Flooding of the coastline. (2) Flooding cause mudslides. [ANY TWO]	(2 x 2)	(4)
1.7.5	Issue early weather warning systems. (2) Awareness and education programmes. (2) Medical and rescue services should be on alert. (2) Evacuation protocols and drills. (2)		(8)

People should be educated to build houses with strong materials. (4 x 2) (2)
People should be educated on how to plan and take precautions such as not crossing rivers. (2)
Storage/provision of clean water and food supplies. (2)
Putting shutter boards on windows. (2)
Sandbags along the riverbanks (2)
Sandbags to reduce flooding. (2)
Maintain coastal vegetation to act as a buffer against storm surges. (2)
[ANY FOUR]

1.8

1.8.1 ALVARO is the first cyclone of 2024. (1)
Tropical cyclone ALVARO starts with letter A. (1)
[ANY ONE] (1 x 1) (1)

1.8.2 No tropical cyclone can form there. (2)
They require Coriolis Force to develop as tropical cyclones develop from 5º south (2)
[ANY ONE] (1 x 2) (2)

1.8.3 To eliminate the negative impacts of tropical cyclones on Madagascar. (2)
To plan and prepare for emergency services. (2)
To protect its unique ecosystem. (2)
To evacuate people and animals living in danger zones (Coastline). (2)
Plan and prepare for future cyclonic events. (2)
[ANY TWO] (2 x 2) (4)

1.8.4 Data can be received on time. (2)
Data can be monitored timeously. (2)
Can help to determine the intensity of tropical cyclones. (2)
Can be used to predict path based on observed trends. (2)
Images can be used to better determine other information such as speed, temperature and wind direction. (2)
[ANY TWO] (2 x 2) (4)

1.8.5 **ECONOMIC IMPACT**
Damage to transport and communication structures. (2)
Damage to personal property/homes. (2)
Businesses damaged. (2)
Financial strain on people, families and businesses. (2)
Insurance companies pay large amounts of claims. (2)
Damage to vegetation, crops and livestock. (2)
Damage to shipping, offshore and coastal structures. (2)
Costly to rebuild. (2)
Negative influence on GDP. (2)
Unemployment. (2)
Creates opportunities for employment for rebuilding. (2)
Impacts negatively on tourism. (2)
Affects trading of goods. (2)
Food insecurity. (2)
Renewal of buildings and infrastructure. (2)

ENVIRONMENTAL IMPACT (2 x 2) (4)

Flooding of low-lying coastal areas. (2)
Coastal erosion. (2)
Saline intrusion of low-lying coastal lands. (2)
Waterborne disease such as cholera. (2)
Ecosystems are disrupted / food chains and food webs are destroyed. (2)
Silt is washed into dams reducing their water holding capacity. (2)
Water table will rise. (2)

[ANY FOUR. SHOULD REFER TO BOTH ECONOMIC AND ENVIRONMENTAL IMPACTS. CAN REFER TO POSITIVE ASPECTS ACCEPT ANY OTHER RELEVANT ANSWERS]

[15]

1.9

1.9.1	Northern (1)	(1 x 1)	(1)
1.9.2	**A** - Mature (1)	(1 x 1)	(1)
1.9.3	A (1)	(1 x 1)	(1)
1.9.4	Fully developed eye (2)	(1 x 2)	(2)
1.9.5	(a) **Eye** – descending air dominated (1) **Eye wall** – rising air dominates	(1 x 2)	(2)
	(b) **Eye – descending air** Clear, cloudless skies due to descending air causing moisture to evaporate (2) Little to no wind due to weak pressure gradient (2) Higher temperature because descending air compresses and heats up. (2) No rainfall due to lack of moisture. (2) **Eye wall – rising air** Strong rising air cause cumulonimbus clouds to develop. (2) Pressure gradient is strong and hurricane strength winds Prevail. (2) Leading left quadrant associated with extremely strong winds due to a combination of rotation and forward movement of the system. (2) Latent heat drives the system. (2) Heavy rainfall due to evaporation over warm waters. (2) [ANY FOUR – **BOTH THE EYE AND THE EYE WALL MUST BE MENTIONED**]	(4 x 2)	(8)
			[15]

1.10

1.10.1	South Atlantic High pressure cell		
1.10.2	Descending air Anti-clockwise circulation Diverging air Semi-permanent and semi stationary		
1.10.3	Ridge		
1.10.4	Rainy		
1.10.5	South		
1.10.6	Mid-latitude cyclone / tropical depression / extra- tropical cyclone/cold front		
1.10.7	Ascending.		
			(7)
		(7 x 1)	

1.11

1.11.1 South Indian High-pressure cell (1)
1.11.2 Anti-clockwise (1)
1.11.3 Cold/cool (1)
1.11.4 North Easterlies (1)
1.11.5 Onshore (1)
1.11.6 Warm and moist (1)
1.11.7 Less moisture (1)

(7 x 1) (7)

1.12

1.12.1 Summer (1) (1 x 1) (1)

1.12.2 Weak subsidence above the plateau. (2)
Inversion is uplifted above the escarpment. (2)
Plateau is receiving more rain. (2)
[ANY ONE] (1 x 2) (2)

1.12.3 Thermal / heat low. (1) (1 x 1) (1)

1.12.4 Orographic rainfall/Convectional. (1) (1 x 1) (1)

1.12.5 The air above the plateau is cold, heavy, and dense, therefor descending. (2)
Cold air pulls under the force of gravity. (2)
[ANY ONE] (1 x 2) (2)

1.12.6 The inversion layer blocks the moist air from the South Indian High-Pressure cell to be advected into the interior. (2)
Descending air is heated up adiabatically and it does not condense. (2)
[ANY TWO] (2 x 2) (4)

1.12.7 There will be less water for irrigation which will decrease farm production. (2)
There will be less water available for the drinking of livestock, which decreases the quality of livestock. (2)
Farmers will be forced to buy expensive water, which will increase the production costs on farms. (2)
Farms will close since there will be no production. (2)
Farming activities will decline. (2)
[ANY TWO] (2 x 2) (4)

[15]

1.13

1.13.1 A zone that separates moist air from dry air. (2) (1 x 2) (2)

1.13.2 Summer. (1) (1 x 1) (1)

1.13.3 Occurs in summer when the low pressure dominates the interior. (2)
Anticyclones are located far from the coast, therefore there is a lot of moisture brought into the interior. (2)
[ANY ONE] (1 x 2) (2)

1.13.4 Warm moist air from the Indian Ocean. (2)
Warm moist air from the warm Mozambique/Agulhas current. (2)
[ANY ONE] (1 x 2) (2)

1.13.5 The cold air (SW) undercuts the warm air (NE) and forces the warm air to rise on the east side of the moisture front. (2)
Rising north easterlies will cool and condense forming cumulonimbus clouds on the east of the moisture front. (2) (2 x 2) (4)

1.13.5	Heavy rainfall will fill up dams and rivers. (2) Overflowing rivers will clean themselves. (2) When the river overflows, it will deposit silt making the soil to be fertile. Nitrates from the lightning will make the soil to be fertile. (2) The water table will rise. (2) [ANY TWO]	(2 x 2)	(4)
			[15]
1.14			
1.14.1	Winter. (1)	(1 x 1)	(1)
1.14.2	The presence of Kalahari High Pressure Cell and (1) Coastal Low-pressure cell. (1)	(2 x 1)	(2)
1.14.3	They are dry since they originate from the plateau (interior) where there is less moisture. (2)	(1 x 2)	(2)
1.14.4	The vertical height of the mountains will cause rapid increase of temperature as winds descends. (2) Wind heats up adiabatically, which will increase the temperature. (2) A steep gradient of mountains causes winds to descend very fast, which increases the speed of the berg winds. (2) [ANY TWO]	(2 x 2)	(4)
1.14.5	They dry up vegetation, making it easier for the fires to be ignited. (2) Berg winds blow at a high speed, making it difficult for fires to be controlled. (2) [ANY ONE]	(1 x 2)	(2)
1.14.6	Build dams in farms to use water to extinguish fires. (2) Build watch towers to see fires as they approach from afar. (2) Create fire breakers to prevent the spread of fires. (2) Educate people about the veld fires. (2) [ANY TWO]	(2 x 2)	(4)
			[15]
1.15			
1.15.1	Katabatic Winds. (1)	(1 x 1)	(1)
1.15.2	Cold and dense. (1) Occurs during calm winter night. (1) Flows downhill. (1) [ANY ONE]	(1 x 1)	(1)
1.15.3	Temperature inversion. (1) Temperature increases with an increase in height in the valley. (2)	(1 + 2)	(3)
1.15.4	The cold air accumulates at the bottom of the valley. (2) The warm air is displaced by the cold air causing warm air to rise accumulating mid-valley. (2)	(2 x 2)	(4)
1.15.5	Cold conditions suits maturing of oranges. (2) Oranges can withstand extreme low temperatures at the bottom of the valley. (2) Cold conditions destroy insects that can destroy oranges. (2) Orange trees are more resistant to coldness. (2) Soil is kept moist by melting frost. (2) [ANY THREE]	(3 x 2)	(6)
			[15]

URBAN CLIMATE

1.16

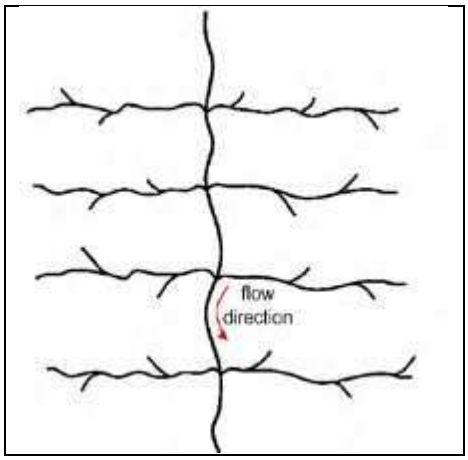
1.16.1	Urban heat island- refers to an area of higher temperatures in an urban area than the surrounding rural areas. (2)	(1 x 2)	(2)
1.16.2	32,8˚C (1)	(1 x 1)	(1)
1.16.3	The temperatures are decreasing. (2)	(1 x 2)	(2)
1.16.4	Leads to multiple reflection of heat which raises temperatures. (2) The heat accumulates close to the windows increasing the temperatures. (2) [ANY ONE]	(1 x 2)	(2)
1.16.5	The man is planting trees/vegetation/ afforestation. (2)	(1 x 2)	(2)
1.16.6	Figure A By planting more trees, it reduces the amount of heat through absorption. (2) Transpiration by trees lowers temperatures. (2) Shadow zone created by trees cools the temperatures. (2) (ANY ONE) Figure B Space between the buildings lowers temperatures because air moves freely. (2) Cooler winds increase between the buildings with open spaces. (2) (ANY ONE) Figure C Water sources absorb heat and uses it in evaporation. (2) Evaporation of water uses heat and lowers temperatures. (2) Water is cooler than surfaces such as sand, tar, concrete etc. (2) (ANY THREE)	(3 x 2)	(6)
			[15]

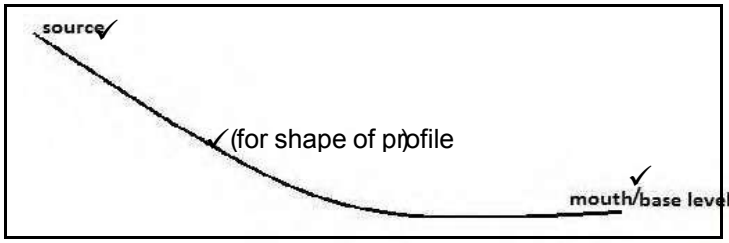
QUESTION 2

2.1			
2.1.1	Z-River source (1)		
2.1.2	Z-Interfluve (1)		
2.1.3	Z-Exotic (1)		
2.1.4	Y-Deranged (1)		
2.1.5	Y-River system (1)		
2.1.6	Y-Surface run off (1)		
2.1.7	Z-Mouth (1)		
		(7 x 1)	(7)

2.2			
2.2.1	Drainage basin B has more streams/tributaries (1)	(1 x 1)	(1)
2.2.2	Less vegetation increases run off and drainage density (2) Steep gradient accelerates water velocity, increasing run off and drainage density (2) Impermeable rocks promote run off (2) **[ANYONE]**	(1 x 2)	(2)
2.2.3	The higher the drainage density, the higher the order of stream (2)	(1 x 2)	(2)

2.2.4	More fingertip streams will develop (2) Drainage density will increase (2) Stream order will increase (2) Volume of water in the river will increase (2) River carrying capacity will increase (2) Erosive ability of the will increase (2) **[ANYONE]**	(1x2)	(2)
2.2.5	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 topsoil (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]**	(4 x 2)	(8)

2.3			
2.3.1	Drainage pattern is the arrangement of streams on a drainage basin (2) **[Concept]**	(1 x 2)	(2)
2.3.2	Second order stream (2nd order)	(1 x 2)	(2)
2.3.3	Fingertip streams will dry out (2) Stream order will decrease (2) Drainage density will decrease (2) **[ANY TWO]**	(2 x 2)	(4)
2.3.4	Underlying rock structure (2) Geology of the area (2) Tectonic forces (2) **[ANYONE]**	(1 x 2)	(2)
2.3.5	 2 marks for the correct shape 2 marks for correct labels: short tributaries/mainstream	(2 x 2)	(4)

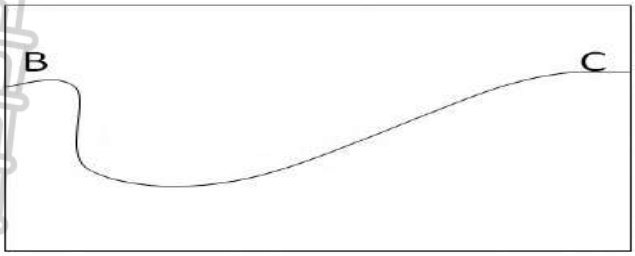
2.4			
2.4.1	Shows the side view of a river from its source to its mouth (2) It is the changing gradient of a river from its source to its mouth (2) **[CONCEPT]** **[ANYONE]**	(1 x 2)	(2)
2.4.2	Waterfall (1) Rapid (1) **[ANYONE]**	(1 x 1)	(1)
2.4.3		(3 x 1)	(3)
2.4.4	Almost smooth riverbed (1) Concave shaped profile (1) **[ANYONE]**	(1 x 1)	(1)

2.4.5	**Processes that the river profile must undergo to be graded** Downward erosion must increase in the upper and middle course (2) The upper course must assume a steeper slope (2) In the upper course discharge must increase and overcome friction (2) Headward erosion must increase to remove temporary base levels of erosion (2) Retreat of waterfalls to remove temporary base levels of erosion (2) Flattening of rapids remove temporary base levels of erosion (2) **[ANY FOUR]**	(4 x 2)	(8)
2.5			
2.5.1	Ungraded profile (1)	(1 x 1)	(1)
2.5.2.	Lake (1) Waterfall (1) Knickpoint (1) Rock outcrops (1) **[ANYONE]**	(1 x 1)	(1)
2.5.3.	A drop in the original sea level (2) Presence of knickpoints/waterfalls (2) Ungraded profile (2) A sudden change in gradient (2) **[ANYONE]**	(1 x 2)	(2)
2.5.4.	The meander will become incised/entrenched (2) The meander will develop steeper sides (2) Will form a cut-off meander/ox bow lake (2) **[ANY TWO- must include reasons]**	(2 x 2)	(4)
2.5.5.	**PROCESSES CREATING THE STEEP GRADIENT IN THE UPPER COURSE** Headward/Backward erosion of knickpoints will increase the steepness of the slope (2) Downward erosion creates a steep gradient (2) In the upper course water flow is mostly turbulent (2) The stream has enough energy to carry larger particles (2) Larger particles increase downwards erosion (2) Processes creating the gradual gradient in the lower course (2) Lateral erosion will lead to a more gradual gradient (2) **[ANY FOUR-MUST REFER TO BOTH GRADUAL AND STEEP GRADIENT]**	(4 x 2)	(8)
2.6			

2.6.1	Upper course (1)	(1 x 1)	(1)
2.6.2	Depth (1) Width (1)	(2 x 1)	(2)
2.6.3	Upper course: vertical/downward erosion due to steep gradient and high-water velocity(2) Lower course: deposition due to gentle gradient and low water velocity (2)	(2 x 2)	(4)
2.6.4	The wide U-shaped profile resulted from lateral erosion (2) The banks of the river are widened through continuous lateral erosion (2)	(2 x 2)	(4)
2.6.5	V-shape of the upper course allows more water to be stored (2) The banks of the river valley act as natural dam walls (2) The depth of the river lessen evaporation (2) **[ANY TWO]**	(2 x 2)	(4)

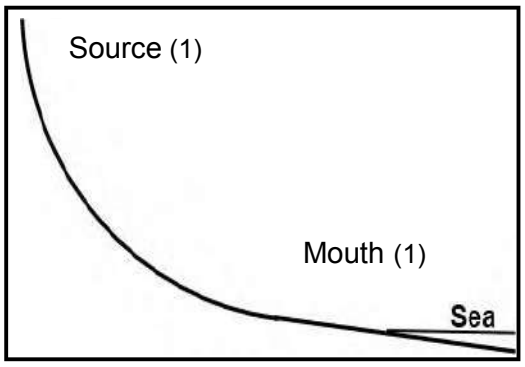
2.7			
2.7.1	B (1)		
2.7.2	C (1)		
2.7.3	A (1)		
2.7.4	C (1)		
2.7.5	D (1)		
2.7.6	B (1)		
2.7.7	D (1)		
2.7.8	C (1)		
2.7.9	B (1)		
2.7.10	A (1)		
		(10 x 1)	(10)
2.8			
2.8.1	Delta (1)	(1 x 1)	
2.8.2	Lower course (old age stage) (1)	(1 x 1)	
2.8.3	Distributaries (1)	(1 x 1)	
2.8.4	Braided stream (2)	(1 x 2)	
2.8.5	The river must have large amounts sediments (2) The sea must have weak currents and small tidal range (2) The sea must be shallow at the river mouth (2) **[ANYONE]**	(1 x 2)	(2)
2.8.6	The fertile land especially for crops like rice (2) Plenty of water for aquaculture (2) Abundant water for domestic activities and drinking (2) Attract tourism opportunities (2) Good transport link (2) **[ANY FOUR]**	(4 x 2)	(8)

2.9			
2.9.1	A-Upper course (1) B-Middle course (1) C- Lower course (1)	(3 x 1)	(3)
2.9.2	3rd order stream (2)	(1 x 2)	(2)
2.9.3	Length (1)	(1 x 1)	(1)
2.9.4	Graded (1)	(1 x 1)	(1)
2.9.5	In the upper course, vertical erosion takes place to result in a steep slope (2) Head-ward erosion removes temporally base levels of erosion such as waterfalls (2) Rapids are removed by downward erosion (2) Deposition must occur on lakes to fill them with river load (2) More lateral erosion on the banks (2)	(4 x 2)	(8)
2.10			
2.10.1	Measure of the total length of streams per unit area (2) **[Concept]**	(1 x 2)	(2)
2.10.2	B (1)	(1 x 1)	(1)
2.10.3	Wet climate(receives high precipitation) (2) Steeper slopes which increase the amount of runoff (2) Impermeable rocks which promote runoff (2) Rock that is non-porous promote run-off (2) High soil moisture which promotes run-off (2) Little vegetation promotes run-off (2) **[ANY THREE]**	(3 x 2)	(6)
2.10.4	Easterly/ from West to East (1)	(1 x 1)	(1)
2.10.5	Tributaries join the mainstream at an acute angle from the west (2)	(1 x 2)	(2)
2.11			
2.11.1	D (1)		
2.11.2	G (1)		
2.11.3	H (1)		
2.11.4	A (1)		
2.11.5	E (1)		
2.11.6	B (1)		
2.11.7	C (1)		
2.11.8	F (1)		
		(8 x 1)	(8)

2.12			
2.12.1	Lower course (1)	(1 x 1)	(1)
2.12.2	Meander (1)	(1 x 1)	(1)
2.12.3 (a)	 1 mark for undercut slope 1 mark for slip-off-slope	(2 x 1)	(2)
(b)	Deposition (1)	(1 x 1)	(1)
(c)	Slow moving water results in deposition (2)	(1 x 2)	(2)
2.12.4	**Formation of a meander** Fast flowing water on the outer bank (undercut slope)results in erosion (2) Slow flowing water on the inner bank (slip off slope) results in deposition (2) This erosion and deposition process result in the meander neck becoming narrower (2) During floods the water cannot negotiate with the meander loop and overflows straight (2) The meander loop is then cut off from the main river to form an ox-bow lake (2) Oxbow lake will eventually dry up to for a meander scar (2)	(4 x 2)	(8)

2.13			
2.13.1	Y (1)		
2.13.2	Z (1)		
2.13.3	Y (1)		
2.13.4	Z (1)		
2.13.5	Y (1)		
2.13.6	Y (1)		
2.13.7	Y (1)		
		(7 x 1)	(7)

2.14			
2.14.1	A river profile that is interrupted by a number of knickpoints creating temporary base level (2) **[Concept]**	(1 x 2)	(2)
2.14.2	Sea level (1)	(1 x 1)	(1)
2.14.3	Presence of knickpoint (2) There is a temporary base level (2) The is an obstruction (2) **[ANYONE]**	(1 x 2)	(2)
2.14.4	Rate of Erosion is equal (balance) to rate of deposition (2)	(1 x 2)	(2)
2.14.5	Bridges need to be created (2) Increase cost of building infrastructure(2) They are navigational hazard (2) **[ANY TWO]**	(2 x 2)	(4)
2.14.6	a) In upper course headward erosion remove temporary base level of erosion which increases steepness and creation of even riverbed (2) b) In upper course downward erosion create steep gradient (2) In the upper course vertical erosion remove temporary base level such as rapids creating steep gradient and even riverbed (2) **[ANYONE]**	(2 x 2)	(4)

2.15			
2.15.1	Ultimate base level (1)	(1 x 1)	(1)
2.15.2	It has got temporary base level (2) It has got obstructions(2) Its multi concave (2) It has got uneven riverbed(2) **[ANYONE]**	(1 x 2)	(2)
2.15.3	Prevents a river from further vertical erosion (2) Overtime it will be eroded by headward erosion (2) **[ANYONE]**	(1 x 2)	(2)
2.15.4	Turbulent flow (1)	(1 x 1)	(1)
2.15.5	Riverbed is uneven (2)	(1 x 2)	(2)
2.15.6	 (one mark for sketch)	(3 x 1)	(3)

2.15.7	Downward/Vertical erosion dominates in the upper course causing a steep valley slope (2). Headward erosion removes temporary base levels of erosion in the upper course(2). Downward/Vertical erosion removes temporary base levels (waterfall) in the upper course(2). This material is then transported downstream(2). Discharge of the river increases in middle course causing lateral erosion.(2) Gradient in the middle course becomes less steep.(2) Deposition dominates in the lower course because the gradient is gentle.(2) Deposited materials fill up lakes and dams.(2) The river profile will now develop a concave shape from upper to lower course.(2) Equilibrium between erosion and deposition will maintain (result in) a graded profile(2) **[ANY TWO]**	(2 x 2)	(4)

2.16			
2.16.1	incised meander (1)		
2.16.2	knickpoint (1)		
2.16.3	valley within a valley (1)		
2.16.4	isostatic uplift (1)		
2.16.5	overgraded river (1)		
2.16.6	rejuvenated river (1)		
2.16.7	paired terraces (1)		
		(7 x 1)	(7)

2.17			
2.17.1	Process where a river has reached base level, regains energy and begins to erode vertically(downwards) once again. (2) **[Concept]**	(1 x 2)	(2)
2.17.2	Erosion (2)	(1 x 2)	(2)
2.17.3	Uplift of land (2) Higher rainfall (2) Increase in volume of water via river capture (2) **[ANY TWO]**	(2 x 2)	(4)
2.17.4	Entrenched meander/incised meander (1)	(1 x 1)	(1)
2.17.5	Uplift of land due to internal movement will result in a change in gradient (1) River regains energy and begins to erode vertically (1)	(2 x 1)	(2)
2.17.6	This type of landscape is not suitable for human activity, since its associated with steep and deep gorges which will not be suitable for settlement (2)		

	Not suitable for the construction of roads, railways and bridges because it will be very expensive (2)	(2 x 2)	(4)

2.18			
2.18.1	Downcutting, refers to erosion that takes place vertically(downwards) (2) **[Concept]**	(1 x 2)	(2)
2.18.2	Erosion (1) deposition (1)	(2 x 1)	(2)
2.18.3	Paired terraces (1)	(1 x 1)	(1)
2.18.4	A meandering river flows over a flood plain (2) It erodes vertically because of rejuvenation, the old flood plain now remains at a higher level (2) A new flood plain starts to develop (2) Old flood plains left at higher level are called river terraces (2) **[ANY TWO]**	(2 x 2)	(4)
2.18.5	During time of flood the river would not be able to overflow since the older flood plains are now much higher thus favour a nearby settlement (2)	(1 x 2)	(2)
2.18.6	The site may be chosen by a farmer because the repeated flooding, would make the land fertile (2) The river would be a good supply of water for irrigation of crops (2)	(2 x 2)	(4)

2.19			
2.19.1	Knickpoint is the point where the old longitudinal profile meets the rejuvenated longitudinal profile (2) OR Sharp change in gradient along the course of a river located at the old sea level (2) **[Concept]**	(1 x 2)	(2)
2.19.2	Erosion (1)	(1 x 1)	(1)
2.19.3	Point/area of the old sea level (1)	(1 x 1)	(1)
2.19.4	Isostatic uplift (1) Drop in sea level (1) **[ANYONE]**	(1 x 1)	(1)
2.19.5	Waterfall (2)	(1 x 2)	(2)
2.19.6	Overgraded river flowing down steep gradient with great energy changed the river profile through the process of river rejuvenation (2) when the sea level dropped (2) Vertical erosion is dominant (2) At the point of the old river, the river profile is	(4 x 2)	(8)

	concave (2) As a result of rejuvenation the profile becomes multi-concave shape (2)		

2.20			
2.20.1	Z (1)		
2.20.2	Z (1)		
2.20.3	Y (1)		
2.20.4	Z (1)		
2.20.5	Z (1)		
2.20.6	Y (1)		
2.20.7	Z (1)		
		(7 x 1)	(7)

2.21			
2.21.1	A process where a more energetic river robs the headwaters of a less energetic river (2) **[Concept]**	(1 x 2)	(2)
2.21.2	River **X** (1)	(1 x 1)	(1)
2.21.3	a) watershed -**D** (1) b) misfit- **B** (1)	(2 x 1)	(2)
2.21.4	Decreased volume of water leaves cultivated land dry for the farming of crops (2)	(1 x 2)	(2)
2.21.5	Greater amount of rainfall will lead the captor stream receiving more water and increased velocity (2) Steeper gradient allows water in one side of the watershed to erode faster (2) Softer rock on the watershed allows the captor stream to erode faster (2) **[ANY TWO]**	(2 x 2)	(4)
2.21.6	The size of the drainage basin decreases due to decreased volume of water (2) The volume of water decreases since its waters had been diverted (2) The velocity of the river decreases due to decreased volume of water (2) The erosive power decreases due to decreased stream flow (2) Deposition occurs due to reduced volume and velocity (2) **[ANY TWO]**	(2 x 2)	(4)

2.22			
2.22.1	Superimposed: The river now flows on an old, uncovered rocks that are exposed by erosion (2) **OR** the river is younger than the underlying rock structure through which it flows (2) Antecedent : The river flows on a young landscape altered by tectonic forces (2) **OR** the river is older than the underlying rock structure through which it flows (2)	(2 x 2)	(4)
2.22.2	**A**: superimposed (1) **B**: antecedent (1)	(2 x 1)	(2)
2.22.3	Knickpoint (1)	(1 x 1)	(1)
2.22.4	Isostatic uplift (2)	(1 x 2)	(2)

2.22.5	Steep areas restrict the building of houses (2) It is expensive to construct roads and bridges (2) Not all steep areas will accommodate various farming activities **(accept examples)** (2)	(3 x 2)	(6)
2.23			
2.23.1	Gauteng (1)	(1 x 1)	(1)
2.23.2	Failing wastewater treatment system (1)	(1 x 1)	(1)
2.23.3	Cholera (accept diarrhoea) (1) Shigella (1) Bilharzia (1) Typhoid (1) Dysentery (1) Salmonellosis (1) E. Coli (1) Hepatitis (1) **[ANYONE]**	(1 x 1)	(1)
2.23.4	Commission instituted an inquiry into the state of affairs of the region's water and sanitation management issues (2) as well as the level and extent of the pollution problem (2)	(2 x 2)	(4)
2.23.5	Strict local by-laws on disposal of waste from both domestic use and industry (2) Buffering the river to prevent further pollution (2) **(accept examples)** Maintaining the natural vegetation and reducing deforestation (2) Education and public awareness on environmental management (2) Regular cleaning of riverbanks and surrounding areas (2) Implementing of fines for violation of environmental regulations (2) Frequent water testing to monitor water quality (2) Relocation of industries away from the river (2) **[ANY FOUR]**	(4 x 2)	(8)

2.24			
2.24.1	The use of water sources (rivers) in a sustainable way so that they are available for future generation (2) **[Concept]**	(1 x 2)	(2)
2.24.2	KwaZulu-Natal (1)	(1 x 1)	(1)
2.24.3	E. Coli (2)	(1 x 2)	(2)
2.24.4	Industrial discharges from factories (1) Raw sewage (1)	(2 x1)	(2)
2.24.5	Reduced water quality as water is contaminated by chemicals (2) Reduced river habitats lead to migration of animals and will be at risk to predators(2) Salts and chemicals result in eutrophication which reduces oxygen (2) (accept algae bloom) Ecosystems and food chains are disrupted due to some animals that have died (2)		

	Plants wilt and die as a result of unfavourable conditions for growth (2) Animals living in water die due to unpleasant environment (2) **[ANY FOUR- ONE MARK FOR A FACTOR AND ONE MARK FOR A QUALIFIER]** **INSTRUCTION FOR PART-MARKING- MAXIMUM FOUR MARKS** **Learners must be given one mark if only stated a factor**	(4 x 2)	(8)
2.25			
2.25.1	The upper reaches of a drainage basin from which a river gets its source of water (2) **[Concept]**	(1 x 2)	(2)
2.25.2	Lake Loskop (1) Lake Flag Boshielo (1) **[ANYONE]**	(1 x 1)	(1)
2.25.3	Acidic water, metals and sulphates from mining and industrial activity(2) Excessively high nutrient input from poorly operating municipal wastewater treatment works as well as some agricultural activities (2) Very high microbial input from untreated or poorly treated sewage (2) **[ANYONE]**	(1 x 2)	(2)
2.25.4	Buffering will demarcate the Olifants River (2) (accept ways of buffering) This will reduce human activities near the river (2) (accept examples)	(2 x 2)	(4)
2.25.5	Farming may take place from the floodplains of the Olifants river and crops may be sold for income (2) Hydroelectricity can be generated to boost coal-generated energy (2) The Olifants river may be used as the transportation medium for goods (2) Fishing is practiced in the river, and this will increase profits (2) The Olifants river is favourable for leisure activities, and this attract tourists for economic gain (2) Water is supplied for industrial use (2) (accept examples) **[ANY THREE]**	(3 x 2)	(6)

PAPER TWO

QUESTION ONE

1.1			
1.1.1	The location of the settlement in relation to its surroundings. (2) [CONCEPT]	(1 x 2)	(2)
1.1.2	Flat land for easy cultivation (2)		
	Fertile soil for crop farming (2)		
	Access to the road to market (2)		
	[ANY TWO]	(2 x 2)	(4)
1.1.3	Isolated/Dispersed (1)		
	Dwellings/Houses are far apart. (2)	(1 + 2)	(3)
1.1.4	Large own farm plots. (2)		
	Greater farm profit from extensive farming. (2)		
	No sharing of ideas and equipment. (2)		
	Greater privacy. (2)		
	[ANY THREE]	(1 x 2)	(6)
			[15]

1.2			
1.2.1	Grow different crops to meet their needs/ families/ local community(2)	(1 x 2)	(2)
1.2.2	Farming done in a small scale. (1) No use of technology(1)	(2 x 1)	(2)
1.2.3	Lack of funding (1) Limited access to bank loan (1) Natural disasters such as floods and droughts (1) Poor infrastructure affect access to market (1) Lack access to training and improve their skills (1) Land ownership issues(1) (ANY ONE)	(1 x 1)	(1)
1.2.4	Subsistence farming produce to meet the needs of the famer and their family (2) While commercial farming produces to sell and make profit(2)	(2 x 2)	(4)
1.2.5	To reduce poverty in rural areas To reduce rural urban migration To provide employment in rural areas To promote food security in local areas	(1 x 2)	(2)
1.2.6	Use of machinery have led to the replacement of many workers That has resulted in high employment loss more especially for unskilled workers	(2 x 2)	(4)
			[15]

1.3			
1.3.1	Decrease in rural population(2)	(1 x 2)	(2)
1.3.2	Youth (1)/ economically active. (1) (ANYONE)	(1 x 1)	(1)
1.3.3	Electricity in urban areas/ luxurious life in urban areas (1) More income (1)	(2 X 1)	(2)
1.3.4	Production decreases and that will negatively affect rural economy (2) Buying power decreases and that will lead to shops shutting down and people will lose jobs(2)	(2 X 2)	(4)
1.3.5	Improved road infrastructure can lead to better transportation of people and goods (2) Improved water infrastructure leads to better access to water and sanitation (2) Improved electricity infrastructure leads to development of business in rural areas (2) Improved infrastructure can create employment opportunities thus preventing rural urban migration. (ANY THREE)	(3 X 2)	(6)
			[15]

1.4			
1.4.1	Dispersed pattern(1)	(1 x 1)	(1)
1.4.2	Lack of entertainment (1) Poor quality housing (1) Travel long distances to access education, health and welfare (1) Farm killings(1) (ANY ONE)	(2 x 1)	(2)
1.4.3	Family units are broken down when parents leave children with grandparents (2) Families will be headed by children (2) It will result in social ills (accept examples)	(1 x 2)	(2)
1.4.4	Migrants may face difficulties finding affordable housing, leading to overcrowding, poor living conditions (informal settlement). (2) Migrants may encounter difficulties communicating in the dominant language of the city, leading to social isolation. (2) Migrants often face exploitation, poor working conditions, and low wages, which can negatively impact their physical and mental health. (2) Migrants may experience loneliness and disconnection from their families and communities back home, leading to emotional distress. (2) Migrants may face challenges accessing healthcare, education, and other essential services due to lack of knowledge, language barriers, or legal status. (2) Migrants may encounter discrimination and stigma from urban residents, which can lead to social exclusion and marginalization. (2) (ANY TWO)	(2 x 2)	(4)

1.4.5	Using farming practices that cope with climate change/ use of drought resistant crops (2) Use scientific technology to monitor environmental conditions Accelerate land reform (2) Improve infrastructure in rural areas (2) Create more jobs opportunities through industrial decentralization or tourism (2) Improve access to capital for farmers (2) Provide training to improve skills for farmers (2) Choose livestock breeds associated with high production (2) Change communal land ownership to individual ownership (2) Reduce use of nitrogenous fertilizers which are harmful to the environment (2) (ANY THREE)	(3 x 2)	(6)
			[15]

1.5			
1.5.1	The programme to bring equitable redistribution of land and access by changing past laws governing land ownership and access to land tenure. (2) [Concept]	(1 x 2)	(2)
1.5.2	Group Areas Act (1)	(1 x 1)	(1)
1.5.3	Land Restitution (2)	(1 x 2)	(2)
1.5.4	Their land will be restored back and they will be compensated as they lost their land through apartheid policies. (2)	(1 x 2)	(2)
1.5.5	They will return to their land which their forefathers bought. (2) With compensation they can rebuild their four churches and three schools. (2) They will rebuild their stone houses with compensation. (2) They will restore their water pump and reservoir which will increase their water access. (2) They can farm their land and feed their families. (2) [ANY FOUR]	(4 x 2)	(8)
			[15]

1.6			
1.6.1	Break of bulk point (1)		
1.6.2	Hierarchy(1)		
1.6.3	Range(1)		
1.6.4	Bridge town/ Junction town(1)		
1.6.5	Threshold population(1)		
1.6.6	Sphere of influence(1)		
1.6.7	High order goods(1)		
1.6.8	Gap town/ gateway town(1)	(8 x 1)	(8)

1.7			
1.7.1	Y(urban expansion)		
1.7.2	Y(urbanization)		
1.7.3	Z(threshold population)		
1.7.4	Y(range)		
1.7.5	Y(urban sprawl)		
1.7.6	Z(low order)		
1.7.7	Y(more)	(7 x 1)	(7)
1.8			
1.8.1	It refers to percentage by which an urban population is increasing (2) [CONCEPT]	(1 x 2)	(2)
1.8.2	High unemployment rates in rural areas(1)	(1 x 1)	(1)
1.8.3	It can be reduced by creating double or triple storey buildings to accommodate people in the city (2) The government's RDP house project must be strengthened (2) Built more flats to accommodate the large urban population (2) Partnership with private sector (financial Support etc.) [ANY TWO]	(2 x 2)	(4)
1.8.4	Lower the rent of the buildings (2) Create jobs through Decentralisation of industries from urban areas (2) Improve work conditions and salaries (2) Provision of basic services such as water, electricity, health (2) Land reform should be accelerated to help the poor. (2) Improve roads and transport facilities 2) Improve access to capital for farmers (2) Provide training courses to improve skills in farming (2) Use of farming practices that can cope with climate changes, e.g. plant drought resistant crops (2) (ANY FOUR)	(4 x 2)	(8)
			[15]

1.9			
1.9.1	Z(grid)(1)		
1.9.2	Z(radial)(1)		
1.9.3	Y(irregular)(1)		
1.9.4	Y(irregular)(1)		
1.9.5	Z(grid)(1)		
1.9.6	Z(radial)(1)		
1.9.7	Y(irregular)(1)		
1.9.8	Z(grid)(1)	(8 x 1)	(8)

1.10.1	A(down town)(1)		
1.10.2	C(closer to the CBD and in more attractive areas)(1)		
1.10.3	B(rural urban fringe)(1)		
1.10.4	C (occupies smaller area and less pollution). (1)		
1.10.5	B(compatibility)(1)		
2.10.6	B(urban profile)(1)		
1.10.7	D/James Vance	(7 x 1)	(7)

1.11			
1.11.1	Sphere of influence refers to the area where urban settlement draws its customers(2)(Concept)	(1 x 2)	(2)
1.11.2	C(1)	(1 x 1)	(1)
1.11.3	Because city C is smaller hence it draws customers from a smaller range(2)	(1 x 2)	(2)
1.11.4	The smaller the central pace, the more central place will be and the larger the central place is, the fewer the central places will be(2)	(1 x 2)	(2)
1.11.5	High order service have more threshold population while low order service have less threshold population(2)	(1 x 2)	(2)
1.11.6	High order goods are goods that are not frequently used and they are expensive(2) while low order goods are convenient goods that are cheaper and are frequently used(2)	(2 x 2)	(4)
			[15]

1.12.1	South African city model(1)	(1 x 1)	(1)
1.12.2	Centrally located(1)	(1 x 1)	(1)
1.12.3	More traffic along heavy industries does not suit high income residential area (2) Heavy industries decreases land values (2) Heavy industries are not aesthetically pleasing for high income residential area. (2) (ANY TWO)	(2 x 2)	(4)
1.12.4	Residential areas/ white residential area(1)	(1 x 1)	(1)
1.12.5	similarities CBD is centrally located on both land use models(2) High income residential area located away from heavy industries(2) Low income residential area is located closer to heavy industries(2) differences In the multiple nuclei, high income residential area is located away from CBD while on South African city it is located closer to CBD(2) In the multiple nuclei, land use zones evolved naturally while on South African city they were influenced by apartheid(2)	(4 x 2)	(8)
			15

1.13			
1.13.1	Tall buildings (1) High building density (1) (ANY ONE)	(1 x 1)	(1)
1.13.2	Crime (1) Grime (1)		

	illegal trading Derelict buildings (1) (ANY TWO)	(2 x 1)	(2)
1.13.3	Drives away investors (2) Lead to commercial decentralisation (2) Repels tourists (2) People lose their jobs (2) Businesses makes less profit due to decreased number of customers (2) (ANY TWO)	(2 x 2)	(4)
1.13.4	Police visibility at all times to reduce crime (2) Fining illegal informal traders (2) Renovating old buildings (2) Commercial decentralisation to reduce the number of people (2) Efficient waste management strategies (2) (ANY FOUR)	(4 x 2)	(8)

1.14			
1.14.1	It is the zone between rural area and urban area(2)	(1 x 2)	(2)
1.14.2	There are commercial activities and residential area(1)	(1 x 1)	(1)
1.14.3	Crime in the CBD has forced businesses to relocate (2) Businesses are making less profit due to high rentals (2) Traffic congestion increase fuel consumption (2) Urban heat island increase energy costs (2) (ANY ONE)	(1 x 2)	(2)
1.14.4	Aesthetic appeal due to greenbelt (2) The area is associated with less pollution (2) Less traffic congestion (2) Less crime (2) Cheaper land value (2) (ANY TWO)	(2 x 2)	(4)
1.14.5	It will increase the levels of air pollution in rural areas (2) Destruction of farmlands will negatively affect farming communities (2) Attract crime to rural areas (2) Loss of jobs in the agricultural sector (2) Traffic congestion will increase (2) Pressure on existing services such as water and electricity (2) (ANY THREE)	(3 x 2)	(6)
			[15]

1.15			
1.15.1	Urban blight - refers to the deterioration, decay, and decline of urban areas (2) Urban blight is a gradual falling apart of a previously functioning city (2)	(1 x 2)	(2)
1.15.2	Urban decay (1)	(1 x 1)	(1)
1.15.3	Buildings are in poor condition (1) Broken windows (1) Litter/pollution in the area (1) Use of cupboards on windows (1) ANY TWO	(2 x 1)	(2)
1.15.4	Increased in the levels of crime (1) Dealing-drugs gangs moving in (1)	(1 x 2)	(2)
1.15.5	Area of expansion of the CBD (2) Attracts low income occupants/tenants that neglect buildings (2) Landlords do not occupy/maintain/upgrade buildings (2) Buildings are left vacant/abandoned (2) Transition zone is a zone of change/invasion & succession occurs (2) Buildings are illegally occupied (2) Lack of basic services (2) Overcrowding due to its close proximity to the CBD (2) Immigrants are attracted due to the low cost of the dwellings (2) Social ills are prevalent for example gangsterism. (2) ANY TWO	(2 x 2)	(4)
1.15.6	People will have better quality housing (2) People will have better access to basic services (2) Creates an improved aesthetic appeal (2) Reduces the crime rate in the area (2) It will attract more businesses (2) It will create more employment opportunities (2) Property values will increase (2) It will create a healthier environment/safer to live in (2) The will be more improvement on infrastructure (2) (ANY TWO)	(2 x 2)	(4)
			[15]

1.16			
1.16.1	congestion (1) Delay (1)	(2 x 1)	(2)
1.16.2	Carbon emissions (1)	(1 x 1)	(1)
1.16.3	Traffic congestion refers to the general slowdown of traffic flow due to high volume of vehicles on a road or at an intersection. (2) A traffic jam occurs when vehicles come to a complete standstill due to various factors, such as accidents, road closures, or bottlenecks. (2) (ANY TWO)	(2 x 2)	(4)
1.16.4	The CBD is more likely to experience congestion because it houses businesses, especially financial institutions. (2) It is well-connected to different parts of the country, resulting in high traffic flow during peak hours. (2)	(2 x 2)	(4)

1.16.5	Expand /widening a road capacity/ adding more lanes to existing roads (2) Building a rapid transit line. (2) Ride-sharing and ride-hailing apps- uber etc. (2) Have wide streets lined with trees (2) Have efficient transport networks (2) Change streets to one way streets (2) Build roundabouts rather than using traffic lights (2) Use adaptive traffic signals (2) Encourage the use of drones for deliveries (2) Establish bus/truck lanes (2) Building of centre islands (2) Use of the interchanges (2) (ANY TWO)	(2 x 2)	(4)
			[15]

1.17.1	Waste material for buildings (1) Portable toilets (1) Shacks closer to each other (1) Littering (1) No tarred roads (1) (ANY ONE)	(1 x 1)	(1)
1.17.2	Overcrowding and overlapping structures – conditions (2)	(2 x 1)	(2)
1.17.3	Shacks too close to each other (2) Highly flammable waste material (2) Usage of paraffin stoves / candles (2) (ANY TWO)	(2 x 2)	(4)
1.17.4	Lack of capital. (2) Corruption among government officials (2) Population growth / urbanization Strategies (2) Building low cost housing (2) up process of land reform Relocate people to safer areas (2) (ANY FOUR)	(4 x 2)	(8)
			[15]

1. 18

1.18.1	Gauteng. (1)	(1 x 1)	(1)
1.18.2	Toilet /roads / shelter. (2) (ANY TWO)	(2 x 1)	(2)
1.18.3	Unemployment / no job opportunities (2) Poverty (2) High cost of formal housing (2) (ANY TWO)	(2 x 2)	(4)
1.18.4	Pollution (2) An act of introducing harmful effects on the environment. (2) (ANY TWO)	(2 x 2)	(4)
1.18.5	Vulnerable to diseases (2) Untidy conditions (2) Vulnerable to fires. ((2) ANY TWO)	(2 x 2)	(4)
			[15]

QUESTION 2

2.1			
2.1.1	A (1)		
2.1.2	C (1)		
2.1.3	B (1)		
2.1.4	D (1)		
2.1.5	B (1)		
2.1.6	C (1)		
2.1.7	C (1)		
2.1.8	B (1)	(8 x 1)	(8)
2.2			
2.2.1	Primary sector (1)	(1 x 1)	(1)
2.2.2	Primary Sector (1) R336 448 000/million (1)	(2 x 1)	(2)
2.2.3	Mining declined by 7.1% (2) Primary sector products have lower profit margins (2) The sector deals with raw materials which sell at lower/cheaper price as compared to products of other sectors. (2)	(2 x 2)	(4)
2.2.4	Tertiary services have high value (2) Tertiary sector is more stable than any other sector (2) There are many products sold in the tertiary sector as compared to other sectors. (2)	(2 x 2)	(4)
2.2.5	This may lead to negative balance of trade (2) This indicates higher spending than income (2) It may lead to more foreign products in the country to compete with local products (2) Local products may suffer as most imports are cheaper. (2) (ANY TWO)	(2 x 2)	(4)
2.3			
2.3.1	28 422 tons1)	(1 x 1)	(1)
2.3.2	Free State (1) Eastern Cape (1) Kwazulu-Natal (1) North West (1) Limpopo (1) (ANY TWO)	(2 x 1)	(2)
2.3.3	Beef exportation earns foreign exchange/income (2)	(1 x 2)	(2)
2.3.4	Beef produced in South Africa can be sold to other countries. (2) Beef producers can earn more income in foreign currency (2) Creation of more job opportunities (2) (Any ONE)	(2 x 2)	(4)

2.3.3	**Cost of animal feed** High cost of animal feed will increase cost production. (2) High cost of animal feed will increase the price of beef. (2) Costly beef will not be able to compete with cheaper beef from other countries. (2) Small-scale farmers or producers will not be able to afford production of beef. (2) **Foot and mouth diseases** Beef from South African can be banned from exportation. (2) Beef producers will lose income when cattle are not selling. Foot and Mouth diseases can lead to death of livestock (2) (ANY THREE)	(3 x 2)	(6)
2.4			
2.4.1	Meat/Livestock (1)	(1 x 1)	(1)
2.4.2	16% (1)	(1 x 1)	(1)
2..4.3	African-economy. (2) Creation of employment (2) Contributed to the GDP (2) Foreign exchange/income earner (2) Provides raw material for the secondary sector (2) (ANY TWO)	(2 x 2)	(4)
2.4.4	North West (1) Free State (1) KwaZulu Natal (1) Eastern Cape (1) (ANY TWO	(2 x 1)	(2)
2.4.5	Temperatures in the eastern part of the country are suitable for cattle farming. (2) Warm temperatures in the eastern part of country are suitable for grazing land and animal feed production. (2)	(2 x 2)	(4)
2.4.6	It spreads fast when it outbreaks (2) It kills livestock (2) Loss of income in the death of livestock (2) Cattle affected cannot be sold in the market resulting to loss of income (2) It is costly to immunise and treat livestock, small scale famers cannot afford. (2) (ANY TWO)	(2 x 2)	(4)
2.5			
2.5.1	Mpumalanga. (1)	(1 x 1)	(1)
2.5.2	ESKOM. (1)	(1 x 1)	(1)
2.5.3	“Arrays of solar panels line the main access road (1)	(1 x 1)	(1)
2.5.4	Depletion of coals as they are non-renewable (2) Labour strikes (2)		

	Accidents (2) Decreases of coal prices/international coal prices (2) (ANY ONE)	(1 x 2)	(2)
2.5.5	Create employment opportunities. (2) Provide source of income. (2) Mining companies contribute to South Africa's GDP through tax based. (2) Elevate poverty. (2)	(2 x 2)	(4)
2.5.6	Using renewable sources of energy will result in job losses in mining industry. (2) There will be high retrenchment rate in other sectors such as secondary and tertiary. (2) South Africa will lose foreign income. (2) South Africa will lose foreign investors. (2) (ANY THREE)	(3 x 2)	(6)
2.6			
2.6.1	Mpumalanga (1)	(1 x 1)	(1)
2.6.2	SASOL (1) ESKOM (1)	(2 x 1)	(2)
2.6.3	Air pollution from the burning of coals generating electricity (2) Land degradation. (2) Opencast mining an eyesore (2) (ANY TWO)	(2 x 2)	(4)
2.6.4	Fines must be imposed to companies responsible for high level of pollution. (2) Planting more trees to absorb carbon emission (2) Using sources of renewable energy (2) Introduce a public and private partnership to regulate carbon emission(2) Rehabilitate the area by using land refill methods (2) Using a technological filters to purify polluted air caused by industries (2) (ANY FOUR)	(4 x 2)	(8)
2.7			
2.7.1	R2 billion (1)	(1 x 1)	(1)
2.7.2	Decreasing (2)	(1 x 2)	(2)
2.7.3	High transport costs as Mpumalanga is located in land far from the harbour /coast (2) High transport costs due to greater distances to harbour(2)	(1 x 2)	(2)
2.7.4	'Decline in investments' (2) 'Disinvestment' (2) 'Giant coal mining companies have sold or are in the process of selling their operations' (2) 'Environmental lobbying groups' (2) 'Moving towards renewable energy' (2) 'High transport costs' (2) 'Altered customer base' (2) 'Hostile funding environment' (2) [ANY TWO]	(2 x 2)	(4)

2.7.3	(Increased) loss of employment opportunities due to decreased production (2) (Increased) loss of revenue due to unemployment (2) Less contribution due to a reduction in tax collection (2) Reduced foreign exchange due to decreased investments (2) Limited development of infrastructure due to decrease in production (2) Closure of industries/business linked to coal mining (accept examples) (2) Smaller local market for goods due to increased unemployment (2) Spending power of workers decreases which results in economic sectors being negatively affected (2) Increased cost of electricity due to less coal available for generation of power (2) Operational costs of industries will increase due to decrease of production (2) (ANY THREE)	(3 x 2)	(6)
2.8			
2.8.1	A- South western Cape (1) B- PE Uitenhage (1) C- Durban Pinetown (1) D- Gauteng/PWV (1)	(4 x 1)	(4)
2.8.2	A- Wine/fresh fruit packing/dried fruit canning/fish/ clothing/food. (1) (ANY ONE) D- Metal, iron and steel, machinery, chemicals, transport, equipment. (1) (ANY ONE)	(2 x 1)	(2)
2.8.3	Dense population (1)	(1 x 1)	(1)
2.8.4	Secondary (1)	(1 x 1)	(1)
2.9			
2.9.1	Manufacturing is the process of converting raw material into finished goods that meet the customers' requirements (CONCEPT) (2)	(1 x 2)	(2)
2.9.2	Secondary sector (1)	(1 x 1)	(1)
2.9.3	Employment creation (1) Economic empowerment (1) (ANY ONE)	(1 x 1)	(1)
2.9.4	Access to foreign currency (2) Larger variety of goods available (2) Better quality of goods (2) Closer ties between countries (2) More exchange of technical knowledge (2) Development of transport and communication (2) Increase in salaries (2) Increase in employment (2) Competition, both internationally and locally (2)	(2 x 2)	(4)
2.9.5	Dependence on developed countries (2)	(4 x 2)	(8)

	Local production can suffer (2) Local industries overshadowed (2) Rich countries may influence political matters in other countries (2) Rivalries amongst nations (2)		
2.10			
2.10.1	15%	(1 x 1)	(1)
2.10.2	Sea (1) Air (1) Land (1) (Accept examples) (ANY TWO)	(2 x 1)	(2)
2.10.3			
a)	Raw materials (accept examples) are available (2) Large skilled and unskilled labour supply (2) Sufficient water supply (2) Specialised transport/infrastructure (for perishable products) (2) Large market (2) Require less space (2) Electricity is available (2) Suitable climate to grow a variety of crops (2) (ANY TWO)	(2 x 2)	(2)
b)	Lack of /Distance from mineral raw materials(2) Electricity is more expensive (2) No coal for power resources (2) Higher transport costs (2) Unreliable water supply (2) Transport infrastructure not adequate (2) Limited space for development (2) (ANY TWO)	(2 x 2)	(2)
2.10.4	West coast SDI links the South-western Cape core industrial region to Saldanha Bay (harbour) which favours exporting. (2) The deep water harbour will allow for the international exportation of larger cargo. (2) N7 to Namibia allows for international export by road. (2) (ANY TWO)	(2 x 2)	(2)
2.11			
2.11.1	Western Cape (1)	(1 x 1)	(1)
2.11.2	To stimulate local economic development (2) To stimulate employment opportunities (2) To position the country with global economy (2) To encourage international competitiveness (2) To encourage sustainable economic growth (2)	(2 x 2)	(4)
2.11.3	Strategic investments in export (2) Strategic investments in manufacturing industries (2)	(2 x 2)	(4)
2.11.4	They pay less for water and electricity (2) Tax concessions (2) Less traffic congestion (2)	(3 x 2)	(6)

	There is skilled labour (2) There are houses for workers (2) Infrastructure is well developed (2)		
2.12			
2.12.1	Manufacturing (1) Electricity gas and water (1) Construction (1) (ANY TWO)	(2 x 1)	(2)
2.12.2	Increasing	(1 x 1)	(1)
2.12.3	Provides raw material to industries (2) Market for industries (2) (ANY ONE)	(1 x 2)	(2)
2.12.4	To attract potential investors	(1 x 2)	(2)
2.12.5	**Positive** Improve infrastructure (2) Reduce traffic congestion (2) Reduce pollution(air and water) (2) Skilled labour (2) **Negative** More competition (2) Lose investors (2) Lose market(2) Industries may shutdown (2) (ANY FOUR)	(4 x 2)	(8)
2.13			
2.13.1	SDI (1)		
2.13.2	IDZ (1)		
2.13.3	SDI (1)		
2.13.4	SDI (1)		
2.13.5	SDI (1)		
2.13.6	IDZ (1)		
2.13.7	IDZ (1)		
2.13.8	IDZ (1)	(7 x 1)	(7)
2.14			
2.14.1	Western Cape	(1 x 1)	(1)
2.14.2	Resource based satisfactory infrastructure (1) Broader social and natural environment (1)	(2 x 1)	(2)
2.14.3	Lack of technical skills (2) Inadequate marketing (2) Growing informal settlement (2) Xenophobia (2) Sand mining decreases tourism (2)	(2 x 2)	(4)
2.14.4	Creates job opportunities for both skilled and unskilled (2) More people earning results into a larger market for goods (2) Provides access to resources (2) The SDI promotes the development of new and improvement of the existing infrastructure (2)	(4 x 2)	(8)

	Efficient transport networks to move raw material and manufactured goods (2) Promotes domestic and international trade (2) Greater income for local community (2) Money generated is used to develop community projects (2) (ANY FOUR)		
2.15			
2.15.1	Is the government programme aimed at encouraging investment and job creation in untapped areas with high growth potential (CONCEPT) (2)	(1 x 2)	(2)
2.15.2	4845.5 direct jobs (1)	(1 x 1)	(1)
2.15.3	As of June 2000, the SDI website indicated that 20 of these projects could be considered operational (1)	(2 x 1)	(2)
2.15.4	Factors favouring the development of West Coast SDI(2) Rich in Resources e.g., avian resources, biodiversity and cultural heritage that attract tourists; agricultural products (rooibos, grains, fruit, potatoes, wine); agrihubs; aqua-hubs; minerals (iron ore) (2) Good labour supply (2) Large market area (2) Sufficient flat land available (2) (ANY TWO)	(2 x 2)	(4)
2.15.5	Social impact of local community (2) Creates employment opportunities for locals. (2) Earning potential of locals increase. (2) Buying power of locals increase. (2) Enables the growth of SMME (Small, Medium & Micro Enterprises). (2) Transportation networks improve accessibility for trade. Communication networks enable growth of the SDI through technology. (2) Attracts informal and other formal economic activities. (2) Improves local infrastructure. (2) Tourism provides opportunities in the informal sector for the buying and selling of arts and crafts. (2) Standard of living (wealth of people) improves. (2) Poverty (the state of not having enough material possessions) is reduced (2) (ANY THREE)	(3 x 2)	(6)
2.16			
2.16.1	N7 (1)	(1 x 1)	(1)
2.16.2	Oil/gas processing (1) Rig repair and servicing (1) Marine vessel repairing (1) Industrial development (1) [ANY ONE]	(1 x 1)	(1)
2.16.3	Accelerated growth of oil and gas production in Africa(1)	(1 x 1)	(1)

	More oil rigs passing by the west coast (1) More maintenance required by passing oil rigs (1) Harbour promotes trade (1) [ANY ONE		
2.16.4	Limited access to power supply increases cost of electricity (2) Dependency on a nuclear power station is a threat to power supply (2) Located away from thermal power plants, thus electricity is expensive (2) Mediterranean climate means they have insufficient rainfall (2) Fresh water supply is restricted/expensive, pushing up production costs (2) Failing electricity infrastructure (2) [ANY TWO]	(2 x 2)	(4)
2.16.5	Increases accessibility (2) Transport of raw materials (2) Transport is needed for finished products (2) Traffic volume will increase, so the roads need to be upgraded (2) To gain access to markets (local and international) (2) To attract foreign and local investment (2) To promote industrial decentralisation (2) To transport labour force to and from work (2) [ANY TWO]	(2 x 2)	(4)
2.16.6	More job/employment opportunities (2) Increase in spending power will lead to more business development (2) Attract both local and foreign investors (2) Contribute to an increase in the GDP (2) Provides greater entrepreneurial opportunities to local communities/SMMEs (2) Infrastructure will be upgraded to meet increased demands (2) Transport routes will be upgraded to improve network efficiency (2) Economy will be decentralised away from the core to stimulate growth in other areas (2) Development associated with the multiplier-effect (2) Promote tourism and provide income (2) [ANY TWO	(2 x 2)	(4)
2.17			
2.17.1	The balance of trade is calculated as the country's value of exports minus value of imports. (2)	(1 x 2)	(2)
2.17.2	It includes wholesale and retail trade, tourism and communications. (2) Now South Africa is moving towards becoming a knowledge-based economy, focusing on technology, e-commerce, financial and other services. (2)	(1 x 2)	(2)

2.17.3	This is due to the location and the access to the harbour. (2)	(1 x 2)	(2)
2.17.4	Development of the linked industries (2) Use semi-skilled and unskilled labour (2) More products for export (2) More foreign income. (2) (ANY TWO)	(1 x 2)	(2)
2.18			
2.18.1	Exchange of goods and service between countries	(1 x 1)	(1)
2.18.2	China	(1 x 1)	(1)
2.18.3	The whole map of Africa is depicted	(1 x 1)	(1)
2.18.4	Trade deal between the African countries and China is mostly beneficial towards China (2) China is literally taking ownership of African resources (2)	(1 x 2)	(2)
2.18.5	Have access to foreign income from exports (2) Stimulates our secondary industry which creates more jobs (2)	(1 x 2)	(2)
2.18.6	Export raw materials as opposed to manufactured goods (2) China exports manufactured goods to our country (2)	(2 x 2)	(4)
2.18.7	We would have to make more loans from the World Bank and other developed countries (2) This would make us more vulnerable to rich countries meddling in our economic matters (2) Local businesses/industries would close (2) Less foreign investment would take place in the country (2) There would-be large-scale job losses (2) (ANY TWO)	(2 x 2)	(4)
2.19			
2.19.1	Informal trader is someone who makes a living through an unregistered business or who provide services without a licence (CONCEPT) (2)	(2 x 1)	(2)
2.19.2	77% of the population	(1 x 1)	(1)
2.19.3	It reduces crime/poverty and food security. (2) Informal sector contributes indirectly to the GDP. (2) Their contribution cannot be directly measured. (2) Many unemployed people are gaining income through informal sector. (2) Promotes entrepreneurship. (2) Decrease dependence to social welfare. (2) It sells goods at a lower price and increase poor people's purchasing power. (2) Encourages purchases of South African goods by tourists at an affordable price (2) (ANY TWO)	(2 x 2)	(4)
2.19.4	Provide a proper market area for informal trading to take place (2)	(4 x 2)	(8)

	Reduce rental in rental in trading areas (2) Provide proper waste removals facilities to reduce rubble and waste (2) Skills training with the aim of development towards the formal sector (2) Interaction with private sector for assistance (2) Create partnership with formal business (2) Provide them with permits (2) Create safe storage facilities (2) Decriminalise informal trading (2) Provision of health care to informal traders at regular intervals (2) Provide short term medium and small enterprise development funding to improve their wares and improve profits (2) (ANY FOUR)		