QUESTION 1

1.1 1.1.1 low (2)
1.1.2 west (2) / east (2)
1.1.3 convex (2)
1.1.4 cliff (2)
1.1.5 grass (2) 5x2=(10)

1.2.1 Mid-latitude cyclone / temperate cyclone / extra-tropical cyclone / wave depression / frontal depression / mid-latitude depression (1) (1)

1.2.2 Wind speed = 0 or calm (1)
Wind direction = No wind (1)
Air temperature = 21/24 °C (1)
Dew point temperature =11 °C (1)
Cloud cover =clear or 0/8 or 0% (1)
No precipitation (1)
Air pressure between 1017 – 1019hPa / mb (1)
Relative humidity is low / Dry (1)
[Any THREE] (3)

1.2.3 A - cold front (1) -
B - warm front (1)
C - occluded front (1) (3)

1.2.4 a) Drop in temperature (2)
Strong winds increases (2)
Cloud cover increases / Cumulonimbus clouds (2)
Rain / snow / precipitation (2)
Atmospheric pressure increases (2)
Wind direction changes (2)
Humidity decreases (2)
[Any TWO] 2x2 = (4)

b) Temperature - Cold air follows cold front (2)
Wind strength - Pressure gradient increases (2)
Cloud cover - Cold air forces warm, moist air to rise (2)
Precipitation - Warm, moist rising air condenses (2)
Air pressure - Cold, dense air follows the cold front (2)
Wind direction - Air rotates clockwise around the MLC (2)
Humidity - Cold air has lower water vapour carrying capacity (2)
[Any TWO reasons] 2x2 = (4)

1.2.5 Presence of mid-latitude cyclone (2) – (All other alternative names as in 1.2.1)
No cloud cover at inland weather stations (2)
Low temperatures along the coast (2)
Low relative humidity (2)
[Any TWO] 2x2 = (4)

1.2.6 Sun direct over Tropic of Cancer therefore ITCZ migrate northwards (2)
During Winter all the pressure belts and the wind belts move northwards (2)
Mid-latitude cyclone situated in westerly wind belt and migrates northwards along with it (2)
Mid-latitude cyclone now passes over the southwestern Cape (2)
With apparent migration of sun to Tropic of Cancer / to the northern hemisphere a northward shift of wind belts occur (2)
[Any TWO] 2x2 = (4)

1.3.1 a) Trellis (1) (1)

b) Main streams flow parallel to one another (2) and tributaries short joining at right angles (2)
Folded structure / inclined strata (2)
Alternate layers of hard and soft rock (2)
Watersheds parallel to one another (2)
Main streams follow syncline and short tributaries flow down limbs (2)
[Any ONE] 1x2 = (2)

c) Strata is folded / inclined (2)
Main streams flow in parallel valleys (2)
Tributaries flow straight down the steep slopes (2)
Tributaries meet main stream at right angles (2)
[Any TWO] 2x2 = (4)

d) Water cannot infiltrate impermeable rock (2)
Water remains on the surface as run-off (2)
Slope is steep (2)
Water flows quickly down the slope and limits infiltration (2)
Absence of vegetation (2)
[Any TWO] 2x2 = (4)

e) - The nature of the precipitation e.g. thunderstorms (2)
Huge amount of water cannot infiltrate and flows over land (2)
- High amount of precipitation (2)
Large volume of water cannot infiltrate and flows over land (2)
- Sparse (little) vegetation / deforestation (2)
Nothing to stop the flow of water therefore infiltration is limited (2)
- Saturated soil (2)
If large amount of water already in soil no more water can infiltrate (2)
- Low porosity (2)
No space for water to seep into the ground and it flows across the surface (2)
- Low permeability (2)
Does not allow water to seep through (2)
[Any ONE factor and a description besides that what is mentioned in **d**] 2x2 = (4)

1.3.2 a) Down slope / Katabatic winds / Drainage wind / Gravity wind (1)
mountain breeze (1) (1)

b) Night (1) (1)

c) Air subsides /sinks down the slopes (2) 1x2 = (2)

d) During the night the valley slopes cool down (2)
Air in contact with valley slopes cool down (2)
Cold air is heavy and dense and sinks down the slopes (2)
[Any TWO] 2x2 = (4)

e) Valley floors are cold (2)
Frost pockets develop on valley floor (2)
Apples/ pears can resist frost (2)
[Any TWO] 2x2 = (4)

1.4.1 K – Butte/ Tafelkop (1)
L – Mesa / Tafelberg (1) (2)

1.4.2 Horizontal (1) (1)

1.4.3 a) K / Butte (2) 1x2 = (2)

b) The top of landform K is narrower / smaller (2) 1x2 = (2)

1.4.4 The top part has a resistant layer, which will not be easily removed (2)
Sides are exposed to weathering and erosion (2) 2x2 = (4)

1.4.5 Karoo / arid / semi-arid regions / Free State-Harrismith / Northern Cape
or (any other example of predominance in local area of the learner)(2) 1x2 = (2)

1.4.6 a) R / Talus / Scree / Debris (2) 1x2 = (2)

b) Resistant layer at Q weathers away (2)
Weathered material falls down and accumulate at the foot of R (2) 2x2 = (4)

1.5.1 Ecosystem is the interaction / interrelationship (1) between biotic / living and abiotic / non living elements in the environment (1)
[Concept] (2)

1.5.2 Sun / solar energy (1) (1)

1.5.3 a) There is a wind mill / borehole to pump groundwater (2) 1x2 = (2)

b) Water table lowered / Dry up (2) 1x2 = (2)

1.5.4 a) Extensively./ Wide spread / Over large area (2) 1x2 = (2)

b) Low rainfall results in sparse / little vegetation (2)
Large farms with few sheep per hectare to have enough grazing (2)
Low carrying capacity of soil (2)
Infertile soil (2)
[Any ONE] 1x2 = (2)

1.5.5 a) Overgrazing removes vegetation (2)
Soil exposed to be washed and blown away (2)
Fewer roots to anchor the soil and it is washed / blown away (2)
Water flow concentrates in animal tracks / trampling (2)
Water cuts into land and erode it away (2)
[Any THREE] 3x2 = (6)

b) - Soil accumulates against the rock lines (2)
Soil not washed / blown away (2)
- Fewer animals give vegetation time to recover (2)
Regrowth of plants protect soil against water and wind (2)
Regrowth of plant roots anchor the soil (2)
- By planting bushes vegetation cover increases (2)
More plants to protect soil against water and wind (2)
More plant roots to anchor the soil (2)
- By filling gullies the concentrated flow of water is reduced (2)
Less soil will be washed away (2)
[Any ONE method] 2x2 = (4)

[100]

QUESTION 2

2.1.1 west (2)
2.1.2 berg winds (2)
2.1.3 trellis (2)
2.1.4 short (2)
2.1.5 bacteria (2) 5x2=(10)

2.2.1 High temperature (1)
Clear skies (1)
North-westerly wind (1)
Low over the coast (1)
High pressure over the interior (1)
Anti-cyclonic down-flow from escarpment (1)
Dry air (1)
Low relative humidity (1)
[Any TWO] (2)

2.2.2 High pressure over eastern interior (1)
Mid-latitude cyclone south of country (1)
Coastal low along Cape south coast (1)
Anti-cyclonic down-flow from escarpment (1)
Low relative humidity (1)
[Any TWO] (2)

2.2.3 Winter (2) 1x2 = (2)

2.2.4 a) Air descends down the escarpment (2)
Descending air heats up adiabatically / 1°C increase per 100m (2)
Bergwinds (2)
Compression of air molecules results in heating of air (2)
[Any TWO] 2x2 = (4)

b) Descending air heats up (2)
As air heats up it cannot condense (2)
Big difference between air temperature and dew point temperature (2)
Stable air conditions (2)
[Any TWO] 2x2=(4)

2.2.5 a) Lead to loss of pastures for cattle farmers (2)
Destroy vegetation and this lead to soil being susceptible to erosion (2)
Damage crops (2)
Kill livestock (2)
Inhabitants loose their means of living (2)
[Any TWO] 2x2 = (4)

b) Educating public about danger of veld fires (2)
Fire breaks (2)
Early warning system e.g. weather forecast (2)
Watch tower / Water bombs (2)
Fines (2)
[Any TWO] 2x2 = (4)

2.2.6 When the cold front passes over / Backing of wind (2) 1x2 = (2)

2.3.1 a) A pocket of warm air over the city (1) surrounded by cooler air over rural areas (1)
[Concept] (2)

b) A pocket of polluted air concentrated over the city (1) that decreases as one moves towards rural surrounding (1)
[Concept] (2)

2.3.2 The city produce a lot of pollutants above it (2)
These pollutants will prevent hot air from escaping from the city (2)
Heat is trapped close to the earth's surface over the city (2)
Pollutants facilitate condensation (2)
Cloud cover develops which traps heat (2)
[Any TWO] 2x2 = (4)

2.3.3 Sea breezes feed cooler air in over the city (2)
Cooler air decreases temperatures (2)
Moisture from the sea reduces intense heating over the city (2)
[Any TWO] 2x2= (4)

2.4.1 Inclined (1) (1)

2.4.2 Homoclinal ridge / cuesta (1) (1)

2.4.3 P – dip slope (1) Q – scarp slope (1) (2)

2.4.4. Homoclinal ridges develop in areas of moderately dipping strata (2)
Non-resistant / soft layers erode away (2)
Resistant / hard layers remain, stick out above surface to form ridges (2) 3x2 = (6)

2.4.5 a) P / dip slope (2) 1x2 = (2)

b) More gentle slope / Q is the steep slope (2) 1x2 = (2)

2.4.6 Wide, flat valleys (2)
Rivers provide water (2)
Weathering provides fertile soil (2)
Mechanisation is possible (2)
Facilitates construction of transport roads (2)
Mountain act as barriers against wind (2)
[Any TWO] 2x2 = (4)

2.5.1 A - captured stream / pirated stream (1)
B - captor stream / pirate stream (1)
D - elbow of capture (1)
E - misfit stream / beheaded stream (1) (4)

2.5.2 Stream on lower level erode headwards (2)
Stream eroding headwards cuts through the watershed (2)
Water of stream on a higher flow level is captured (2)
Water of stream on higher level diverted to stream on lower level (2)
[Any THREE] 3x2 = (6)

2.5.3 Water from river A added to that of river B (2)
Volume of water increases and river channel B can no longer contain the water effectively (2)
Water will burst the river banks and flow onto the flood plain (2)
[Any TWO] 2x2 = (4)

2.5.4 It will increase its energy (2) due to an increase in volume (2)
River B will be more erosive (2)
[Any ONE] 1x2 = (2)

2.6.1 a) A series of food chains (1) that are connected to one another (1)
[Concept] (2)

b) The transfer of food energy (1) by a series of organisms feeding successively on one another (1)
[Concept] (2)

2.6.2 Grass (1) → Earthworm (1) → Mole (1) → Owl (1) → Jackal (1)
Grass (1) → Earthworm (1) → Finch (1) → Owl (1) → Jackal (1)
Grass (1) → Rabbit (1) → Owl (1) → Jackal (1)
Grass (1) → Mouse (1) → Owl (1) → Jackal (1)
[Any ONE – must be in the given order] (4)

2.6.3 Population numbers will increase (2
Imbalance in ecosystem (2)
[Any ONE] 1x2 = (2)

2.6.4 Vegetation will be destroyed / become less (2) 1x2 = (2)

2.6.5 Organisms depend on others to obtain food / energy (2)
Insects and other animals act as pollinators (2)
Certain animals assist in seed dispersal (2)
Vegetation provides habitat for other organisms (2)
Clearing vegetation leads to microclimatic changes (2)
Vegetation protects soil against erosion (2)
To maintain environmental stability (2)
Aesthetic value (2)
[Any TWO – Accept other] 2x2 = (4)

2.6.6 Declaring other plant and animal species as endangered species (2)
Selecting certain sites and declaring them as protected area (2)
Educating public (2)
Laws protecting certain species and fines if it is removed (2)
Environmental conservation (2)

[Any TWO – Accept other] 2x2 = (4)

[100]

QUESTION 3

3.1.1	a)	B / D (2)	1x2 = (2)
	b)	C (2)	1x2 = (2)
3.1.2	a)	B (2)	1x2 = (2)
	b)	A (2)	1x2 = (2)
	c)	D (2)	1x2 = (2)
3.2.1	a)	Exact piece of land (1) occupied by a settlement (1) [Concept]	(2)
3.2.2	a)	Fertile soil / arable land (1) River (1) Flat land (1) [Any TWO]	(2)
	b)	River / Water (1) Fertile soil / arable land (1) Building material from forest (1) Fuel from forest (1) [If learner only says forest (1) mark only] River sand for building material (1) [Any TWO]	(2)
3.2.3	a)	Private landownership (2)	1x2 = (2)
	b)	Time is not wasted in travelling because the farmer lives on the farm (2) Less money spent on travelling costs (2) There is proper supervision and control of workers (2) Farmer manages own farm and use own initiative (2) Easy to introduce soil conservation methods (2) Motivated by profits (2) [Any TWO]	2x2 = (4)
3.2.4	a)	Rectangular / Elongated (2)	1x2 = (2)
	b)	Access to road (2) Access to water (2) [Any ONE]	1x2 = (2)
3.2.5.	a)	Yes / Dry-point settlement (2)	1x2 = (2)
	b)	Farmstead are away from the river (2) River poses a threat and dry site is chosen (2) [Any ONE]	1x2 = (2)
3.2.6	a)	A - commercial (2) B - subsistence (2)	2x2 = (4)

b) A - modern methods of farming (2)
modern equipment / motor vehicle (2)
farm divided into camps (2)
sheds for storage (2)
[Any ONE – Accept other]

B - family members share the fields (2)
no camps (2)
cattle roam freely (2)
water collected manually from river (2)
no specialisation of crops (2)
old methods of farming are used (2)
[Any ONE – Accept other] 2x2 = (4)

3.2.7 a) Droughts (2)
Floods (2)
Low wages (2)
Lack of job opportunities (2)
Poor standard of living (2)
Lack of services e.g. no medical, education, recreation facilities (2)
Rising costs of farming (2)
Low output per farming unit / uneconomical farming units (2)
Farm killings (2)
[Any TWO – Accept other] 2x2 = (4)

b) Security becomes a problem when people migrate to the cities (2)
Resources remain unused (2)
Farmhouses are abandoned (2)
No population growth (2)
Population ages (2)
The cycle of decline and decay sets in (2)
Some services had to be closed down because they receive less support (2)
Quality of services decline (2)
[Any TWO – Accept other] 2x2 = (4)

c) Decentralisation of the economic activities to the rural areas (2)
Establish game reserves and game parks (2)
Creation of job opportunities through promotion of tourism and recreation facilities (2)
Attract pensioners and commuters to live in rural settlements (2)
Empower subsistence farmers through education in good farming practices (2)
Assist farmers during times of flooding and droughts (2)
Provide / improve quality services (2)
Improve security for farmers / regular patrols (2)
Provide basic needs (2)
[Any TWO – Accept other] 2x2 = (4)

3.3.1 Land use zone refer to the various urban zones that exist (2)
[Concept] (2)

3.3.2 Central business district / commercial (1)
Zone of decay / transition zone (1)
Industrial zone (1)
Residential zone (1)
Recreation / open spaces / green belts (1)
Rural-urban fringe (1)
Administrative zone
Decentralised commercial zone (1)
[Any THREE] (3)

3.3.3 a) Urban profile (1) (1)

b) The density of the buildings decreases (2) 1x2 = (2)

c) The height of the buildings decreases (2) 1x2 = (2)

d) City centre most accessible (2)
Competition for land (2)
Land values high in city centre (2)
To use the land economically buildings are close and high (2)
Limited space in city centre (2)
Away from city centre the land is cheaper and developers can afford large pieces of land (2)
[Any TWO] 2x2 = (4)

3.3.4 a) Different functions are mixed in this zone (2)
E.g. warehouses, light industries, commercial, residential, taxi ranks, stations (2)
[Concept] 2x2 = (4)

b) Light industries (2) [Examples of industries accepted]
Such industries attract customers from the CBD (2)
Close to CBD / market to dispatch goods (2)
Little pollution (2)
[Any ONE reason] 2x2 = (4)

c) High (2) 1x2 = (2)

d) CBD will expand into transition zone (2)
Land is in demand (2)
Competition for land will increase land value (2)
[Any TWO] 2x2 = (4)

e) Renovations of the buildings (2)
Decreasing density of buildings (2)
Providing open spaces / parks (2)
Providing entertainment centres (2)
Providing family crisis centres (2)
[Any TWO – Accept other] 2x2 = (4)

3.3.5 a) High order - functions that require a large threshold population and an extensive range / goods relatively expensive / required less frequently (2) [Concept]

Low order - functions that require a small threshold population and a small range / goods relatively cheap / required more frequently (2)[Concept] 2x2 = (4)

b) Because the zone is more accessible and the main routes converge here (2)
Large number of potential customers (2)
[Any ONE] 1x2 = (2)

c) People who are staying in the city need basic services (2)
People who are working in the city need basic services (2)
[Any ONE] 1x2 = (2)

d) High land value (2)
Traffic congestion (2)
Pollution (2)
High crime rate (2)
Lack of space (2)
Expensive rentals (2)
[Any TWO – Accept other] 2x2 = (4)

e) (Commercial) decentralisation (2) 1x2 = (2)

f) Improve public transport (2)
Park and ride schemes (2)
Limit number of private vehicles entering the CBD (2)
Work flexi time (2)
Better policing (2)
Install CCTV cameras (2)
Reduce rentals (2)
[Any TWO – Accept other] 2x2 = (4)

[100]

QUESTION 4

4.1.1 a) A (2) 1x2 = (2)
b) D / B (2) 1x2 = (2)

4.1.2 a) D (2) 1x2 = (2)
b) A (2) Give marks if says only 1 settlement 1x2 = (2)
c) C (2) 1x2 = (2)

4.2.1 A grouping of people, activities, building structures and communication networks (1) which function together on a daily basis as a single, integrated system (1)
[Concept] (2)

4.2.2 a) Dispersed settlement (1) (1)
b) Single farmstead in the middle of cultivated lands (1) (1)

4.2.3 a) Rural settlement (1) (1)
b) Primary activity / farming takes place (2)
Presence of fields and orchards (2)
[Any ONE] 1x2 = (2)

4.2.4 If one product fails farmer can fall back on income from other product (2)
Reduce risk of loss (2)
Farming takes place throughout the year (2)
Maximize profits in markets (2)
Always have an income (2)
[Any THREE] 3x2 = (6)

4.2.5 a) The site is at the centre / middle of the farm (2) 1x2 = (2)

b) Minimise travelling distance (2)
Minimise travelling costs (2)
Good control of farming activities (2)
Easy to dispatch and collect implements / products (2)
[Any TWO] 2x2 = (4)

4.3.1 The movement of people from rural areas to settle in urban areas (1) resulting in a decline in rural population numbers (1)
[Concept] (2)

4.3.2 A condition when a place experience below normal annual rainfall (1) and this persists for a long period of time (1)
[Concept] (2)

4.3.3 Drop in production (2)
Farmer can no longer pay workers (2)
Workers loose their jobs (2)
No income to make proper living (2)
[Any THREE – Accept other] 3x2 = (6)

4.3.4 There is a dam on the farm (2) 1x2 = (2)

4.3.5 Apply scientific / improved farming methods (2)
Use less wasteful irrigation methods (2)
Contour ploughing reduces run-off (2)
Protect natural vegetation and do not leave field bare (2)
Reduce number of cattle on farms (2)
Do not irrigate in dry regions (2)
Using underground water (boreholes) (2)
Build large storage dams (2)
Inter-basin water transfer scheme (2)
Drought resistant crops (2)
Cloud seeding (2)
Water restrictions (2)
[Any TWO – Accept other] 2x2 = (4)

4.3.6 Have adequate water resources e.g. dams (2)
Have adequate stock of fodder for animals (2)
Farm more than one product - has alternative source to fall back on (2)
Insurance to protect against drought (2)
Income reserves from selling produce before drought occurred (2)
Government intervention to support commercial farmers (2)
[Any TWO – Accept other] 2x2 = (4)

4.4.1 a) Easy plan to layout (2)
Easy for subdivision of land into smaller rectangular plots (2)
Easy construction of buildings (2)
Easy to find way around (2)
[Any TWO] 2x2 = (4)

b) Motorists find it very boring to drive (2)
Smooth flow of traffic is hampered by rectangular intersections (2)
Accidents (2)
Steep roads in hilly areas (2)
Increases the occurrence of hijacking (2)
[Any TWO] 2x2 = (4)

c) Naledi (2) 1x2 = (2)

d) Old fashioned street plan (gridiron / rectangular / block) (2) 1x2 = (2)

4.4.2 a) Area in outskirts of city (1) set aside for industrial development (1)
[Concept] (1)

b) Heavy industries (1) (1)

c) Away from city centre and built up areas (2)
Near mass transport facilities (2)
Nearby labour (2)
Large cheap land (2)
[Any ONE] 1x2 = (2)

d) Close to major transport route / outer ring road / inter section of the road (2) 1x2 = (2)

e) Away from city because of air pollution (2)
Away from city because of noise pollution (2)
Away from city because of bad odours / smells (2)
Land cheaper on outskirts (2)
Large pieces of land are needed / expansion possibilities (2)
Dangerous activities away from city centre and built up areas (2)
Near labour (2)
[Any TWO – Accept other] 2x2 = (4)

f) Land value lowered (2)
[If learner says increase, look at reason] 1x2 = (2)

g) Pollution increased (2)
Volume of heavy traffic increased (2)
More noise (2)
Industry unsightly (2)
Potential danger (2)
[Any TWO – Accept other] 2x2 = (4)

4.4.3 a) Protea (2) 1x2 = (2)

b) Due to wind direction pollution from industrial estate is blown in the direction of Protea (2)
Protea is closest to industrial estate (2)
[Any ONE] 1x2 = (2)

c) Putting pollution filters to reduce emissions (2)
Plant more trees (2)
Legislation to force industries to reduce emissions (2)
Taller chimneys to release pollution above the inversion layer (2)
Limit industrial activities at night time (2)
[Any TWO] 2x2 = (4)

4.4.4 a) Regional shopping centre (1) (1)

b) Inner city corner shops (1) (1)

c) Regional shopping centre has a large range (2)
Need large threshold population (2)
Provide services that are not needed daily (2)
Customers are prepared to travel greater distances to use services provided here (2)
[Any ONE]
Inner city corner shops have small range (2)
Need small threshold population (2)
Sell basic goods / convenient goods that are required daily (2)
Customers not prepared to travel great distances to buy basic goods (2)
[Any ONE] 2x2 = (4)

d) S (2) 1x2 = (2)

e) S does not provide the same variety of goods as H (2)
S does not provide as many high order functions as H (2)
[Any ONE] 1x2 = (2)

f) H (2) 1x2 = (2)

g) People are prepared to travel a greater distance to visit higher order functions found at H (2) 1x2 = (2)

[100]

QUESTION 5

5.1.1 a) grassland (2)
b) summer (2)
c) convectional (2) 3x2 = (6)

5.1.2 a) A (2) 1x2 = (2)
b) B (2) 1x2 = (2)

5.2.1 E - Mpumalanga (1)
F - Limpopo / Northern province (1)
G - Northwest (1)
H - Free State (1) (4)

5.2.2 Highveld / Temperate (1) (1)

5.2.3 Johannesburg (1) (1)

5.3.1 Water (1) Arable land (1) Air (1)
Food (1) Minerals (1) Forests (1)
Open spaces (1)
[Any TWO] (2)

5.3.2 Pretoria as administrative capital (2)
Centralisation of industries (2)
PWV area (2)
Gold mines (2)
Job opportunities (2)
Better services (2)
Better infrastructure (2)
[Any TWO] 2x2 = (4)

5.3.3 Water: More water needed for household and industrial purposes (2)
Land: More people need more land for settlement (2)
Air: More people need more fresh air and pollute air on a large scale (2)
Food: More difficult to provide food for growing population (2)
Minerals: More people lead to more extraction to provide for industries (2)
Forest resources: More space needed for urban growth (2)
Open spaces: Utilised for urban and industrial growth (2)
[Any TWO – MUST refer to Q5.3.1] 2x2 = (4)

5.3.4 Decentralisation of industries to rural areas or other provinces (2)
Slow down population growth rate (2)
Restrictive measures to reduce smoke pollution (accept example) (2)
Inter-basin water transfer schemes (2)
Recycling of materials (2)
Declare open spaces as protected areas (2)
Encourage sustainable development (2)
[Any TWO – accept other] 2x2 = (4)

5.3.5 Educating people on the opportunities that fewer children provide for improving standards of living (2)
Population policies which promotes smaller families and higher standard of living (2)
Job creation to improve standard of living (2)
Birth control programmes (2)
Law or taxes to control the number of children that people have (2)
Heavy taxes for parents with more than two children (2)
Parents with more than two children pay extra for education (2)
No polygamy (2)
[Any THREE – Accept other] 3x2 = (6)

5.4.1 Gold (1) (1)

5.4.2 Golden Arc (1) (1)

5.4.3 Geology – wide variety of minerals (2)
Minerals like coal close to Earth's surface and easily removed (2)
Low geothermal gradient and temperatures do not increase rapidly as one goes underground (2)
Skill and ingenuity (2)
High level of organization (2)
Foreign investment (2)
Government support and protection (2)
Devaluation of currencies (2)
Large skilled and unskilled labour pool (2)
Well developed infrastructure (2)
Moderate climate results in more pleasant working environment (2)
[Any TWO] 2x2 = (4)

5.4.4 Large distances between mines and harbours (2)
Dependence on foreign markets (2)
High cost in training and housing labourers (2)
Immigrants from other parts of Southern Africa (2)
Water shortages (2)
Underground water floods mines (2)
High temperatures in western half of country (2)
Fluctuating market prices (2)
Non-renewable minerals (2)
Accidents lead to long times of closure (2)
Negative impact of mining on the environment (2)
Health risks (2)
Labour disputes and strikes (2)
[Any TWO] 2x2 = (4)

5.4.5 Earn a smaller amount of foreign exchange as processed materials worth more (2)
South Africa import the processed minerals again from other countries at a much higher price (2)
Decrease employment opportunities (2)
[Any TWO] 2x2 = (4)

5.5.1 Gross Domestic Product (2) (2)

5.5.2 The total value of all the goods and services (1) produced in the country over a period of one year (1)
[Concept] (2)

5.5.3 Many gold mines (2)
Industries in PWV area (2)
Most government employees in Pretoria (2)
Many head offices of companies in Pretoria and Johannesburg (2)
Wide range of employment opportunities (2)
High value goods produced (2)
Greater purchasing in power (2)
[Any TWO] 2x2 = (4)

5.5.4 a) There are many skilled and unskilled labourers in the area (2)
The area is rich in raw materials, e.g. gold, maize, coal and iron (2)
Farming activities provide raw materials for industries (2)
The transport network is excellent and goods can easily be transported to other parts of South Africa (2)
The large population in Gauteng provides a ready market for all manufactured goods (2)
The coal-fields of Mpumalanga close-by provide cheap thermal electricity (2)
Water is available from the Tugela-Vaal and Lesotho Highlands water transfer schemes (2)
Relative flat land on the Plateau (2)
[Any TWO] 2x2 = (4)

b) Over-use of water and electricity lead to shortages (2)
The roads are inadequate for the increased volume of traffic, resulting in traffic congestion / deliveries slow / workers late (2)
Air pollution is increasing and industries are forced to relocate further out of town due to restrictions on smoke production (2)
The area is vulnerable in times of political crisis or war (2)
Over population (2)
Running short of open space for further development (2)
[Any TWO] 2x2 = (4)

c) Iron and steel, e.g. ISCOR / MITTAL and Highveld Steel (2)
Engineering and metal processing, e.g. Atlas Aircraft (2)
Chemical industries e.g. SASOL (2)
Car assembly plants in Pretoria and Johannesburg (2)
[Any ONE – Accept other] 1x2 = (2)

5.5.5 a) Centralisation (2)
Traffic congestion (2)
Urban decay (2)
Air pollution (2)
Noise pollution (2)
Water pollution (2)
Destruction of the environment (2)
Housing shortages / informal settlements (2)
Crime (2)
Unemployment (2)
Poverty (2)
[Any TWO- Accept other] 2x2 = (4)

b) Centralisation: Decentralise functions to smaller towns (2)
Traffic congestion: Improve public transport (2)
Ban or tax private cars in CBD (2)
Park-and-ride systems (2)
Flexi-time for workers (2)
Better use of one way street (2)
Bus and taxi lanes (2)
Lift clubs (2)
Gautrain (2)
Synchronised robots (2)
Toll roads (2)
[Accept others]
Urban decay: Proper building maintenance (2)
Urban renewal (2)
Gentrification (2)
Restoration (2)
Demolition and renewal (2)
Conservation of important city architecture (2)
Social upliftment (2)
[Accept other]
Air pollution: Regulate carbon monoxide emission from cars (2)
Use more clean fuel (2)
Regulate pollution with legislation and fines (2)
[Accept others]
Noise pollution: Stricter regulations regarding land use (2)
Proclamation of larger green belt areas (2)
The development of improved silencer systems (2)
[Accept others]
Water pollution: Clean up urban streams (2)
Legislation on the use of river frontage (2)
Testing water regularly (2)
Putting filters into drains (2)
[Accept others]
Destruction of environment: Stricter control and planning of urban development (2)
[Accept others]
Housing: Job creation to provide income (2)
Self-building schemes (2)
[Accept others]

Crime: Better policing (2)
Neighbourhood watch (2)
Moral regeneration (2)
[Accept others]
Unemployment: Skill people on entrepreneurial opportunities (2)
[Accept others]
Poverty: Self help schemes (2)
Provision of basic needs (2)
Job creation (2)
Education / training (2)
[Accept others]
[One solution for each problem mentioned in Question 5.4.5] 2x2 = (4)

5.6.1 It is a major industrial area (2)
There is a high concentration of productive people, factories and consumers (2)
Concentration of gold mining activities (2)
[Any ONE] 1x2 = (2)

5.6.2 It ensures that people and goods can be transported to any destination within South Africa (2)
It also ensures that goods can be imported or exported (2)
Capital can be earned (2)
[Any TWO] 2x2 = (4)

5.6.3 Traffic congestion (2)
High accident rate (2)
[Any ONE] 1x2 = (2)

5.6.4 Yes (2)
Capital earned can be used to build new roads (2)
Capital earned can be used to maintain existing roads (2)
Less congestion if more roads are built (2)
Safer roads if roads are maintained (2)
[Any ONE reason – Accept other]
OR
No (2)
Alternative roads got congested (2)
Don't want to pay and use alternate roads (2) 2x2 = (4)

5.7.1 X - Orange / Gariep / Senqu (1)
Y - Tugela (1) (2)

5.7.2 Namibia (1) (1)

5.7.3 Atlantic Ocean (1) (1)

5.7.4 High population density requires water for domestic use (2)
Increased irrigation farming activities along the Vaal River (2)
An increase in mining activities (2)
Rapid industrial development (2)
[Any TWO] 2x2 = (4)

5.7.5 Royalties (money earned) on water sales (2)
A greatly improved infrastructure (2)
Employment during the construction phase (2)
Employment as an indirect spin-off from the expected growth in tourism, fishing, forestry and irrigation agriculture (2)
An independent electricity supply (2)
[Any TWO – Accept other] 2x2 = (4)

[100]

QUESTION 6

6.1.1 a) subtropical forest / savannah (2)
b) subsistence (2)
c) Orange-Fish (2) 3x2 = (6)

6.1.2 a) A (2) 1x2 = (2)
b) C (2) 1x2 = (2)

6.2.1 Lesotho (1) (1)

6.2.2 Indian Ocean (1) (1)

6.2.3 Mozambique Current (1) (1)

6.2.4 Warm (1) (1)

6.2.5 a) Increases temperature (2) 1x2 = (2)

b) Air that rests on the warm current is heated (2)
Warm air moves in over land (2)
It raises the temperature over coastal areas (2)
[Any TWO] 2x2 = (4)

c) High temperatures throughout the year (2)
Tourist will thus visit this area throughout the year (2)
Holiday resorts / settlement develop along the coast (2)
High temperatures promote agricultural activities through out the year (2)
Jobs created (2)
[Any TWO – Accept other] 2x2 = (4)

d) Tertiary (2) 1x2 = (2)

e) Tourism provides a service (2) 1x2 = (2)

6.3.1 Pineapples (1)
Citrus fruit (1) [Accept examples] (2)

6.3.2 Primary (2) 1x2 = (2)

6.3.3 Raw materials are extracted (2) 1x2 = (2)

6.3.4 a) The Eastern Cape is a dry area / lack of water / low rainfall (2) 1x2 = (2)

b) It will increase the output (2) 1x2 = (2)

c) More water is available (2)
Larger areas could now be cultivated (2)
Areas that could previously not be farmed are now farmed (2)
More agricultural products now be produced / yields increase(2)
[Any ONE] 1x2 = (2)

d) Agriculture could now contribute more to the GDP (2) 1x2 = (2)

6.4.1 D - Port Elizabeth (1) E - East London (1) (2)

6.4.2 South Africa's location at the southern most tip of Africa (2)
Halfway between western European and Asia (2)
Our ports are the gateways to the European and Asian markets for many countries in Southern Africa (2)
Large tankers that cannot pass through the Suez Canal use our ports as important stopover points. (2)
During times of political instability the Middle East, South Africa's ports benefit economically. (2)
[Any TWO] 2x2 = (4)

6.4.3 Large tankers that stop over: fill up with fuel (2)
buy provisions (2)
repair ships / dry docks (2)
Employment created in harbours (2)
Money spent in harbour locations (2)
Improve trade relations (2)
Skills development (2)
[Any TWO – Accept other] 2x2 = (4)

6.5.1 Farmers produce sufficient crops (1) for the needs of their families (1)
[Concept] 1x2 = (2)

6.5.2 Traditional farming methods (2) 1x2 = (2)
Small plots / land / farms (2)
Using wood as a fuel (2)
No mechanisation (2)
No fences / land not divided (2)

6.5.3 Farmer only produces for own needs (2)
No surpluses are produced (2)
Absence of trade (2)
There is no capital income (2)
Absence of technology (2)
[Any TWO] 2x2 = (4)

6.5.4 Establish schools to educate farmers (2)
Modern machinery (2)
Better farming methods (2)
Use of fertilisers (2)
Specialization (2)
Scientific farming methods (2)
Financial assistance from government (2)
[Any TWO] 2x2 = (4)

6.5.5 Good summer rains on the Highveld (2)
Winter rains in the South-West Cape. (2)
The variety of climates allows a wider range of crops (products) to be grown (2)
Permanent rivers and groundwater allow for good agriculture (2)
Fertile soil (2)
Better research and education has improved farming methods (2)
Industrial growth has created a market for agricultural products (2)
The good network of roads and railways enables farm products to reach the market (2)
The ability to predict the likelihood of droughts has reduced farming losses (2)
New plant and animal strains have been introduced (2)
New ways of combating diseases and insect pests are being used (2)
Since 1994 more countries willing to buy South African products (2)
After negotiations with the EU in 1999, South African agriculture now enjoys tariff-free preferences on the huge European market for its canned fruit, cut flowers, wine and dairy products (2)
The land Bank provides low-interest loans to formally disadvantaged people to help them start farming (2)
Mechanisation of agriculture (2)
Agriculture is commercialised (2)
Agriculture is specialised (2)
Agriculture is market orientated (2)
[Any TWO] 2x2 = (4)

6.6.1 Increased removal (1) of natural vegetation (1) [Concept] (2)

6.6.2 People need more land for settlement (2)
People need more wood for fire (2)
People need more land for agriculture (2)
People need more land for industry (2)
People need more land for transport and communication. (2)
[Any TWO] 2x2 = (4)

6.6.3 Fewer plants to produce food (2)
Plant species destroyed / become extinct (2)
Organisms depending on vegetation for food decrease (2)
Organisms destroyed / become extinct (2)
Habitat for organisms destroyed (2)
Soil erosion increases (2)
Soil fertility decreases (2)
Biodiversity reduced (2)
Imbalance of ecosystem (2)
[Any TWO – Accept other] 2x2 = (4)

6.6.4 Ensuring adequate reproduction by leaving large tracts of vegetation undisturbed (2)
Only fell (chop down) trees that are dead (2)
Only fell (chop down) trees if needed (2)
Replant indigenous / same tree that has been felled (chopped down) (2)
Introducing laws to protect indigenous plants against removal (2)
Leave wetlands in their natural state (2)
Not cleaning vegetation or ploughing within 10 metres of river banks (2)
Establish botanical gardens (2)
Create seed banks (2)
[Any TWO] 2x2 = (4)

6.7.1 Acquired Immune Deficiency Syndrome (2) (2)

6.7.2 a) Decrease in <u>population numbers</u> (2)
More people will die of HIV/Aids in the years to come (2) 2x2 = (4)

(b) It will hamper / restrict <u>economic development</u> (2)
Economically active population gets more infected (2)
Labour force reduced (2)
Costs / government expenses (2)
[Accept example of impact of AIDS] 2x2 = (4)

(c) Broken or child headed families (2)
Mother and (or) father dies of Aids and leave orphans (2)
Elderly / Grandparents looking after the children (2) 2x2 = (4)

6.7.3 Abstinence (2)
Practicing safe sex / provide condoms (2)
Educate people (2)
Monogamy (2)
Faithfulness to one sexual partner (2)
Anti-retroviral medication to limit mother to child transmission (2)
Campaigns supported by government (2)
Needle exchange programme (2)
Make Aids a notifiable disease (2)
[Any TWO] 2x2 = (4)

[100]

GRAND TOTAL: 300

VRAAG 1

1.1 1.1.1 Laag (2)
1.1.2 Wes / oos (2)
1.1.3 Konveks (2)
1.1.4 Krans (2)
1.1.5 gras (2) 5x2=(10)

1.2.1 Middelbreedtesikloon / matige sikloon / buite-tropiese sikloon / golfdepressie frontale depressie/ middelbreedte depressie (1) (1)

1.2.2 Windsnelheid = 0 / kalm (1)
Windregting = Geen wind (1)
Lugtemperatuur = 21/24 °C (1)
Doupunttemperatuur =11 °C (1)
Wolkdekking = geen wolke of 0/8 / 0%(1)
Geen neerslag (1)
Lugdruk = 1017 - 1019 hPa (1)
Relatiewe vogtigheid laag / Droë lug (1)
[Enige DRIE] (3)

1.2.3 A - koue front (1)
B - warm front (1)
C - okklusie front (1) (3)

1.2.4 a) Afname in temperatuur (2) [Kan 'n laer syfer gee]
Sterk winde (2)
Toename in wolbedekking / Cumulonimbus wolke (2)
Reën / sneeu / presipitasie (2)
Toename in atmosferiese druk (2)
Windrigting verander (2)
Vogtigheid neem af (2)
[Enige TWEE] 2x2 = (4)

b) Temperatuur – koue lug volg koue front (2)
Windsterkte – drukgradiënt neem toe (2)
Wolkdekking – koue lug forseer warm, vogtige lug om te styg. (2)
Presipitasie – warm, vogtige stygende lug kondenseer (2)
Lugdruk – koue, digte lug volg die koue front (2)
Windrigting – lug roteer regom rondom die middelbreedtesikloon (2)
Humiditeit – koue lug het laer vogdraende kapasiteit (2)
[Enige TWEE redes] 2x2 = (4)

1.2.5 Aanwesigheid van middelbreedtesikloon (2) [Of ander alternatiewe terme soos bo]
Geen wolkbedekking by binnelandse weerstasies (2)
Lae temperatuur langs kus (2)
Lae relatiewe vogtigheid (2)
[Enige TWEE] 2x2 = (4)

1.2.6 Die son is direk oor die Kreefskeerkring en daarom migreer ITKS noordwaarts (2)
Gedurende winter beweeg alle drukgordels en windgordels noordwaarts (2)
Die middelbreedtesikloon is geleë in die westewindgordel en mogreer saam met dit noordwaarts (2)
Middelbreedtesikloon beweeg nou oor Suidwes-Kaap (2)
Met waarskynlike migrasie van son na kreefskeerkring / na die noordelike halfrond kom 'n noordwaartse skuif van windgordels voor (2)
[Enige TWEE] 2x2 = (4)

1.3.1 a) Tralie (1) (1)

b) Hoofstrome vloei parallel langs mekaar (2)
takstrome sluit reghoekig aan (2)
Plooigebied / Hellende lae (2)
Afwisselende lae van harde en sagte gesteentes (2)
Waterskeidings parallel aan mekaar (2)
Hoofstrome volg sinklien en kort takstrome vloei teen hellings af (2)
[Enige EEN] 1x2 = (2)

c) Lae is geplooi / hellend (2)
Hoofstrome vloei in parallele valleie (2)
Takstrome vloei regaf van steil hellings (2)
Takstrome ontmoet hoofstroom reghoekig (2)
[Enige TWEE] 2x2 = (4)

d) Water kan nie infiltreer by onderdringbare gesteentes (2)
Water bly op oppervlak as afloop (2)
Helling is steil (2)
Water vloei vinnig teen die helling af (2)
Geen plantegroei (2)
[Enige TWEE] 2x2 = (4)

e) - Die aard van die neerslag, bv. donderstorms (2)
Groot hoeveelheid water kan nie infiltreer en vloei oor land (2)
- Groot hoeveelheid neerslag (2)
Groot volume water kan nie infiltreer en vloei oor grond (2)
- YI plantegroei / Ontbossing (2)
Niks om die vloei van water te verhoed, daarom is infiltrasie beperk (2)
- Versadigde grond (2)
As groot hoeveelheid water alreeds in grond is, kan daar nie meer water infiltreer nie (2)
- Lae porositeit (2)
Geen ruimte vir water om in grond te sypel en dit vloei oor die oppervlakte (2)
- Lae permeabiliteit (2)
Laat nie water toe om deur te sypel nie (2)
[Enige EEN faktor en 'n beskrywing wat **NIE** in **d** genoem is **NIE**] 2x2 = (4)

1.3.2 a) Katabatiese winde / Dreineringswinde / Bergbries (1) (1)

b) Nag (1) (1)

c) Lug daal / dreineer af teen die hellings (2) 1x2 = (2)

d) Gedurende die nag koel valleihange af (2)
Lug in aanraking met valleihange koel ook af (2)
Koue lug is swaar en dig en dreineer af teen die hange (2)
[Enige TWEE] 2x2 = (4)

e) Valleivloere is koud (2)
Rypholtes ontwikkel op valleivloer (2)
Appels/ pere kan ryp weerstan (2)
[Enige TWEE] 2x2 = (4)

1.4.1 K – Tafelkop / Butte (1)
L – Mesa / Tafelberg (1) (2)

1.4.2 Horisontaal (1) (1)

1.4.3 a) K / Butte (2) 1x2 = (2)

b) Die bopunt van landvorm K is nouer / kleiner 1x2 = (2)

1.4.4 Die bopunt het 'n weerstanbiedende laag, wat nie maklik verwyder sal word (2)
Kante word blootgestel aan verwering en erosie (2) 2x2 = (4)

1.4.5 Karoo / Droë / Semi-ariede streke / Noordkaap / Vrystaat – Harrismith (of enige ander relevante voorbeeld waar die landskap oorwegend voorkom) (2) 1x2 = (2)

1.4.6 a) R / talus / puinhang (2) 1x2 = (2)

b) Weerstandbeidende laag by Q verweer weg (2)
Verweerde materiaal val af en akkumuleer teen die voet van R (2) 2x2 = (4)

1.5.1 Ekosisteem is die interaksie / interverwantskap (1) tussen biotiese (lewende) en abiotiese (nie-lewende) elemente in die omgewing (1) [Begrip] (2)

1.5.2 Son (1) (1)

1.5.3 a) 'n Windpomp / boorgat (2) 1x2 = (2)

b) Water tafel word verlaag / Droog op (2) 1x2 = (2)

1.5.4 a) Ekstensief / uitgesprei / oor groot gebied (2) [Begrip] 1x2 = (2)

b) Lae reënval lei tot yl / min plantegroei (2)
Groot plase met min skape per hektaar om genoeg weiding te hê (2)
Lae drakrag van grond (2)
Onvrugbare grond (2)
[Enige EEN] 1x2 = (2)

1.5.5 a) Oorbeweiding verwyder plantegroei (2)
Grond blootgestel om weggespoel en weggewaai te word (2)
Minder wortels om grond te anker en dit word weggespoel / weggewaai (2)
Watervloei konsentreer in voedpadjies van diere (2)
Water sny in die grond en erodeer dit weg (2)
[Enige DRIE] 3x2 = (6)

b)
- Grond akkumuleer teen rotslyne (2)
  Grond nie weggespoel / weggewaai (2)
- Minder diere gee plantgroei kans om te herstel (2)
  Hergroei van plante beskerm grond teen water en wind (2)
  Hergroei van plantwortels anker die grond (2)
- Deur bosse te plant word beskerming van plantbedekking verhoog (2)
  Meer plante om grond teen water en wind te beskerm (2)
  Meer plantwortels om grond te anker (2)
- Deur slote op te vul word gekonsetreerde vloei van water verminder (2)
  Minder grond word weggespoel (2)

[Enige EEN Metode] 2x2 = (4)

[100]

VRAAG 2

2.1 2.1.1 Wes (2)
2.1.2 bergwinde (2)
2.1.3 tralie (2)
2.1.4 kort (2)
2.1.5 bakterieë (2) 5x2=(10)

2.2.1 Hoë temperatuur (1)
Mooiweer (1)
Noordwestelike winde (1)
Laagdruk oor kus (1)
Hoogdruk oor binneland (1)
Lug daal antisiklonies teen platorand (1)
Droë lug (1)
Lae relatiewe vogtigheid (1)
[Enige TWEE] (2)

2.2.2 Hoogdruk oor oostelike binneland (1)
Middelbreedtesikloon suid van die land (1)
Lug daal antisiklonies teen platorand (1)
Kuslaag langs die Kaapse suidkus (1)
Lae relatiewe vogtigheid (1)
[Enige TWEE] (2)

2.2.3 Winter (2) 1x2 = (2)

2.2.4 a) Lug daal teen die platorand af (2)
Dalende lug verhit adiabaties / 1°C toename per 100m (2)
Samepersing van lugmolekules veroorsaak toename in temp (2)
Bergwinde (2)
[Enige TWEE] 2x2 = (4)

b) Dalende lug verhit (2)
Soos lug verhit kan dit nie kondenseer nie (2)
Groot verskil tussen lugtemperatuur en doutemperatuur (2)
Stabiele lugtoestande (2)
[Enige TWEE] 2x2 = (4)

2.2.5 a) Lei tot verlies van weiding vir veeboere (2)
Plantegroei vernietig en grond meer vatbaar vir erosie (2)
Beskadig gewasse (2)
Vee brand dood (2)
Inwoners verloor inkomste (2)
[Enige TWEE] 2x2 = (4)

b) Voed die publiek op oor veldbrande (2)
Voorbrande (2)
Vroegtydige waarskuwingstelsels bv.weervoorspellings (2)
Uitkyk toring / waterbomme (2)
Boetes (2)
[Enige TWEE] 2x2 = (4)

2.2.6 Wanneer die koue front verbybeweeg / Krimping vind plaas / Windrigting verander (2) 1x2 = (2)

2.3.1 a) 'n Koepel van warm lug oor die stad (1) omring deur koeler lug oor landelike gebiede (1) [Begrip] (2)

b) 'n Koepel van besoedelde lug gekonsentreer bokant die stad (1) wat afneem soos 'n mens na die omringende landelike omgewing beweeg (1) [Begrip] (2)

2.3.2 Die stad produseer baie besoedeling middele daarbokant (2)
Hierdie besoedelingsmiddele vehoed dat warm lug ontsnap vanaf die stad (2)
Hitte is vasgevang naby die aardoppervlak oor die stad (2)
Besoedelingsmiddele fasiliteer kondensasie (2)
Wolkbedekking ontwikkel wat hitte vasvang (2)
[Enige TWEE] 2x2 = (4)

2.3.3 Seebriese voer koue lug in oor die stad (2)
Kouer lug verlaag temperatuur (2)
Vog vanaf die see verminder intense verhitting oor die stad (2)
[Enige TWEE] 2x2= (4)

2.4.1 Hellend (1) (1)

2.4.2 Homoklinale rug / cuesta (1) (1)

2.4.3 P – duikhelling / cuesta (1)
Q – eskarphelling / skerprugbult (1) (2)

2.4.4. Homoklinale rûe ontwikkel in gebiede van matig duikende lae (2)
Nie-weerstandbeidende lae erodeer weg (2)
Weerstandbiedende lae bly en steek uit bokant oppervlak om rûe te vorm (2) 3x2 = (6)

2.4.5 a) P / Duikhelling (2) 1x2 = (2)

b) Meer geleidelike helling / Q is die steiler helling (2) 1x2 = (2)

2.4.6 Wye, gelyk valleie (2)
Riviere voorsien water (2)
Verwering voorsien vrugbare grond (2)
Meganisasie is moontlik (2)
Maklik om paaie te bou (2)
Berg dien as beskerming teen wind (2)
[Enige TWEE] 2x2 = (4)

2.5.1 A – geroofde stroom (1)
B – rowerstroom / roofstroom (1)
D – roofelmboog (1)
E – verarmde stroom / onthoofde stroom (1) (4)

2.5.2 Stroom op laer vlak erodeer terugwaarts (2)
Terugwaarts eroderende stroom kerf deur die waterskeiding (2)
Water van stroom op hoer vlak word geroof (2)
Water van stroom op 'n hoër vlak wyk na stroom op laer vlak (2)
[Enige DRIE] 3x2 = (6)

2.5.3 Water van rivier A gevoeg tot dié van rivier B (2)
Volume van water neem toe en rivierkanaal B kan nie meer die water effektief inhou nie (2)
Water oorspoel die rivierbanke en vloei op die vloedvlakte (2)
[Enige TWEE] 2x2 = (4)

2.5.4 Dit sal die energie vermeerder (2) as gevolg van 'n toename in volume (2)
Rivier B sal meer erodeer (2)
[Enige EEN] 1x2 = (2)

2.6.1 a) 'n Reeks voedselkettings (1) wat mekaar verbind is (1) [Begrip] (2)

b) Die oordrag van voedselenergie (1) deur 'n reeks organismes wat suksesvol op mekaar teer (1) [Begrip] (2)

2.6.2 Gras (1) → Erdwurm (1) → Mol (1) → Uil (1) → Jakkals (1)
Gras (1) → Erdwurm (1) → Vink→ Uil (1) → Jakkals (1)
Gras (1) → Haas (1) → Uil (1) → Jakkals (1)
Gras (1) → Muis (1) →Uil (1) → Jakkals (1)
[Enige EEN – moet wees in die volgorde soos aangedui] (4)

2.6.3 Bevolkingsgetalle sal toeneem (2)
Wanbalans in die ekosisteem (2)
[Enige EEN] 1x2 = (2)

2.6.4 Plantegroei sal vernietig word / minder word (2) 1x2 = (2)

2.6.5 Organismes is afhanklik van ander om voedsel /energie te bekom (2)
Insekte en ander diere tree op as bestuiwers (2)
Sekere diere ondersteun in saad verspreiding (2)
Plantegroei voorsien habitat vir ander organisismes (2)
Verwydering van plantgroei lei tot mikroklimaatologiese veranderings (2)
Plantegroei beskerm grond teen erosie (2)
Behou omgewingstabiliteit (2)
Estetiese waarde (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

2.6.6 Verklaring van ander plant- en dierespesies as bedreigde spesies (2)
Kies sekere standplase en verklaar hulle as beskermde gebiede (2)
Opvvoeding van gemeenskap (2)
Wette om sekere spesies te beskerm en boetes as dit verwyder word (2
Omgewingsbewaring (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

[100]

VRAAG 3

3.1.1	a)	B / D(2)	1x2 = (2)
	b)	C (2)	1x2 = (2)
3.1.2	a)	B (2)	1x2 = (2)
	b)	A (2)	1x2 = (2)
	c)	D (2)	1x2 = (2)

3.2.1 Presiese terrein (1) wat deur 'n nedersetting beslaan word (1) [Begrip] (2)

3.2.2 a) Vrugbare grond / bewerkbare grond (1)
Rivier (1)
Gelyk grond (1)
[Enige TWEE] (2)

b) Rivier / Water (1)
Vrugbare grond / bewerkbare grond (1)
Boumateriaal van woud (1)
Brandstof van woud (1)
[Indien leerder slegs "woud" sê slegs (1)]
Riviersand vir boumateriaal (1)
[Enige TWEE] (2)

3.2.3 a) Privaat grondeienaarskap (2) 1x2 = (2)

b) Geen tyd word gemors omdat boer op die plaas woon (2)
Minder geld bestee aan vervoerkoste (2)
Daar is voldoedende toesig en kontrole oor werkers (2)
Boer bestuur eie plaas en gebruik eie inisiatief (2)
Maklik om grondbewaringsmetodes in te stel (2)
Gemotiveer deur wins (2)
[Enige TWEE] 2x2 = (4)

3.2.4 a) Reghoekig / langwerpig (2) 1x2 = (2)

b) Toegang tot pad (2)
Toegang tot water (2)
[Enige EEN] 1x2 = (2)

3.2.5. a) Ja / Droëpuntnedersetting (2) 1x2 = (2)

b) Plaasopstalle weg van die rivier (2)
Rivier hou bedreiging in en droë standplaas is gekies (2)
[Enige EEN] 1x2 = (2)

3.2.6 a) A – kommersiële (2)
B – bestaans (2) 2x2 = (4)

(b) A – moderne boerderymetodes (2)
moderne toerusting / motorvoertuie (2)
plaas opverdeel in kampe (2)
skure vir stoorplek (2)
[Enige EEN – Aanvaar ander]

B – familielede deel die landerye (2)
Geen kampe (2)
Vee swerf vryelik (2)
Water met die hande van rivier gehaal (2)
Geen spesialisering van gewasse (2)
Ou boerderymetodes word gebruik (2)
[Enige EEN – Aanvaar ander] 2x2 = (4)

3.2.7 a) Droogtes (2)
Vloede (2)
Lae lone (2)
Gebrek aan werksgeleenthede (2)
Lae lewenstandaard (2)
Gebrek aan dienste bv. geen medies, onderwys, ontspannings-fasiliteite (2)
Stygende koste van boerdery (2)
Lae uitsette per plaaseeenheid / onekonomiese plaaseenhede (2)
Plaasmoorde (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

b) Veiligheid word 'n probleem wanneer mense na stede migreer (2)
Hulpbrone bly onbenut (2)
Leë plaashuise (2)
Geen bevolkingsgroei (2)
Bevolking verouder (2)
Die siklus van agteruitgang en verval tree in (2)
Sommige dienste moet gesluit word omdat hulle minder ondersteuning kry (2)
Kwaliteit van dienste gaan agteruit (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

c) Desentalisasie van ekonomiese aktiwiteite na landelike gebiede (2)
Vestig wildreservate en parke (2)
Skep werksgeleenthede deur toerisme en ontspanningsfasiliteite te bevorder (2)
Lok pensioenarisse en pendelaars om in landelike nedersettings te kom woon (2)
Bemagtig bestaansboere deur middel van opleiding in goeie boerdery praktyke (2)
Verleen hulp aan boere gedurende tye van vloed en droogtes (2)
Voorsien / verbeter kwaliteit dienste (2)
Verbeter veiligheid van boere / gereelde patrollies
Voorsien basiese behoeftes (2)
[Enige EEN – Aanvaar ander] 2x2 = (4)

3.3.1 Grondgebruiksone verwys na die verskeie stedelike sones (2) [Begrip] (2)

3.3.2 Sentrale sakekern / kommersieël (1)
Vervalsone / oorgangsone (1)
Nywerheidsone (1)
Residensiële sone (1)
Ontspanning / oop ruimtes / groen gordels (1)
Landelike-stedelike oorgangsone (1)
Administratiewe sone (1)
Gedesentraliseerde kommersiële sone (1)
[Enige DRIE] (3)

3.3.3 a) Stedelike profiel (1) (1)

b) Die digtigheid van geboue neem af (2) 1x2 = (2)

c) Die hoogte van die geboue neem af (2) 1x2 = (2)

d) Middestad (SSK) meer toeganklik (2)
Kompetisie vir grond (2)
Grondwaardes hoog in middestad (SSK) (2)
Om grond ekonomies te benut is geboue naby mekaar en hoog (2)
Beperkte ruimte in middestad (SSK) (2)
Weg van middestad (SSK) is grond goedkoper en ontwikkelaars kan groot stukke grond beskostig (2)
[Enige TWEE] 2x2 = (4)

3.3.4 a) Verskeie funksies is gemeng in hierdie sone (2)
Bv. pakhuise, ligte nywerhede, kommersieël, Residensieel, Taxistaanplekke, Treinstasies (2)
[Begrip] 2x2 = (4)

b) Ligte nywerhede (2)
Sulke nywerhede lok klante van die SSK (2)
Naby die SSK / mark om produkte te versend (2)
Min besoedeling (2)
[Enige EEN] 1x2 = (2)

c) Hoog (2) 1x2 = (2)

d) SSK sal uitbrei tot in oorgangsone (2)
Grond is in aanvraag (2)
Kompetisie vir grond sal grondwaardes laat styg (2)
[Enige TWEE] 2x2 = (4)

e) Opknapping van die geboue (2)
Voorsien oop ruimtes / parke (2)
Verminder digtheid van geboue (2)
Voorsien ontspanningsentrums (2)
Voorsien familie krisis sentrums (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

3.3.5 a) Hoë orde funksies wat 'n groot drempelbevolking en 'n groot reikwydte vereis / goedere relatief duur / meer gereeld benodig (2) [Begrip]
Lae orde funksies wat 'n klein drempelbevolking en 'n klein reikwydte vereis / goedere relatief goedkoop / minder gereeld benodig (2) [Begrip] 2x2 = (4)

b) Die sone is meer toeganklik is en hoofroetes konvergeer hier (2)
Groot aantal potensiële kliënte (2)
[Enige EEN] 1x2 = (2)

c) Mense wat in die stad woon benodig basiese dienste (2)
Mense wat in die stad werk benodig basiese dienste (2)
[Enige EEN] 1x2 = (2)

d) Hoë grondwaardes (2)
Verkeersopeenhpings (2)
Besoedeling (2)
Hoë misdaadvlakke (2)
Gebrek aan ruimte (2)
Hoë huur (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

e) (Kommersiële) desentralisasie (2) 1x2 = (2)

f) Verbeter openbare vervoer (2)
Parkering en saamry geleenthede (2)
Beperk aantal privaat voertuie wat die SSK binnegaan (2)
Werk fleksi-tye (2)
Beter polisiëring (2)
Installeer geslote baan televisie kameras (2)
Verlaag huur (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

[100]

VRAAG 4

4.1.1 a) A (2) 1x2 = (2)
b) D / B (2) 1x2 = (2)

4.1.2 a) D (2) 1x2 = (2)
b) A (2) [Gee punte indien gesê net een nedersetting] 1x2 = (2)
c) C (2) 1x2 = (2)

4.2.1 'n Groep mense, aktiwiteite, geboue strukture en kommunikasie netwerk (1) wat op 'n daaglikse basis gesamentlik fungeer as 'n enkele, geïntegreerde sisteem (1) [Begrip] (2)

4.2.2 a) Verspreide nedersetting (1) (1)

b) Alleenstaande plaasopstal in die middel van bewerkte landerye (1) (1)

4.2.3 a) landelike nedersetting (1) (1)

b) Primêre aktiwiteit / boerdery vind plaas (2)
Aanwesigheid van landerye en boorde (2)
[Enige EEN] 1x2 = (2)

4.2.4 As een produk misluk, kan die boer terugval op inkomste van 'n ander produk (2)
Verminder risiko van verliese(2)
Boerdery vind plaas regdeur die jaar (2)
Winste word vergroot op mark (2)
Het altyd 'n inkomste (2)
[Enige DRIE] 3x2 = (6)

4.2.5 a) Hierdie standplaas is in die middel van die plaas (2) 1x2 = (2)

b) Verminder reiskostes(2)
Verminder reisafstande (2)
Goeie beheer oor boerdery aktiwiteite (2)
Maklik om implemente / produkte te versend en versamel (2)
[Enige TWEE] 2x2 = (4)

4.3.1 Die beweging van mense vanuit landelike gebiede om hulle in stedelike gebiede te vestig (1) wat lei tot 'n afname in landelike bevolkingsgetalle (1) [Begrip] (2)

4.3.2 'n Toestand waneer 'n plek minder as die normale jaarlikse neerslag ondervind (1) en dit hou aan vir 'n lang periode (1)
[Begrip] (2)

4.3.3 Afname in produksie (2)
Boer kan nie meer werkers betaal nie (2)
Werkers verloor werk (2)
Geen inkomste om 'n bestaan te maak (2)
[Enige DRIE – Aanvaar ander] 3x2 = (6)

4.3.4 Daar is 'n dam op die plaas (2) 1x2 = (2)

4.3.5 Gebruik meer efektiewe besproeiingsmetodes (2)
Kontoerploeëry verminder afloop (2)
Beskerm natuurlike plantgroei en moenie veld brak laat (2)
Verminder getal vee op die plase (2)
Moenie besproeiing toepas in droë gebiede (2)
Gebruik ondergrondse water (boorgat) (2)
Bou groot opgaardamme (2)
Wateroordragskemas (2)
Droogte bestande gewasse (2)
Wolkbestrooiing (2)
Waterbeperkings (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

4.3.6 Het genoeg waterbronne bv. damme (2)
Het genoeg voorraad voer vir diere (2)
Boer met meer as een produk – het 'n alternatiewe bron om op terug te val (2)
Versekering teen droogte (2)
Inkomste reserwes opgebou uit verkoop van produkte voordat droogte voorkom (2)
Staatshulp tydens droogtes om kommersiële boere te ondersteun (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

4.4.1 a) Maklik om te beplan en uit te lê (2)
Maklik vir onderverdeling van grond in kleiner reghoekige erwe (2)
Maklik vir oprigting van geboue (2)
Maklik om weg te vind (2)
[Enige TWEE] 2x2 = (4)

b) Motoriste vind dit vervelig om in te ry (2)
Gladde vloei van verkeer word belemmer deur reghoekige straatkruisings (2)
Steil paaie in heuwelagtige gebiede (2)
Vergroot kanse op motorkapings (2)
[Enige TWEE] 2x2 = (4)

c) Naledi (2) 1x2 = (2)

d) Uitgedateerde straatpatroon (rooster / blok) (2) 1x2 = (2)

4.4.2 a) Gebied in buitewyke van die stad (1) opsy gesit vir industriële ontwikkeling (1) [Begrip] (2)

b) Swaar nywerhede (1) (1)

c) Weg van middestad en beboude gebiede (2)
Naby massavervoerfasiliteite (2)
Naby arbeidsmag (2)
Groot goedkoop grond (2)
[Enige EEN] 1x2 = (2)

d) Naby hoofverkeersroetes / buite sirkelpad / naby padkruisings (2) 1x2 = (2)

e) Weg van stad as gevolg van lugbesoedeling (2)
Weg van stad as gevolg van geraasbesoedeling (2)
Weg van stad as gevolg van slegte reuke (2)
Grond goedkoper in buitewyke en groot stukke grond word benodig (2)
Gevaarlike aktiwiteite weg van middestad en beboude gebiede (2)
Naby arbeiders (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

f) Grondwaardes verlaag (2)
[Indien kandidate sê "verhoog" kyk na rede] 1x2 = (2)

g) Besoedeling het toegeneem (2)
Volume van swaar verkeer het toegeneem (2)
Meer geraas (2)
Nywerheid onooglik (2)
Potensiële gevaar (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

4.4.3 a) Protea (2) 1x2 = (2)

b) As gevolg van die windrigting sal die besoedeling van die nywerheidslandgoed in die rigting van Protea gewaai word (2)
Protea is die naaste aan die nywerheidslandgoed (2)
[Enige EEN] 1x2 = (2)

c) Plasing van besoedelingsfilters om vrylating te verminder (2)
Plant meer bome (2)
Wetgewing om nywerhede te dwing om vrylating van besoedeling te verminder (2)
Hoër skoorstene om besoedeling bokant die inversielaag vry te stel (2)
Beperk nywerheidsaktiwiteite snags (2)
[Enige TWEE] 2x2 = (4)

4.4.4 a) Streekswinkelsentrum (1) (1)

b) Hoekwinkels in die middestad (1) (1)

c) Streekswinkelsentrum het 'n groot reikwydte (2)
Benodig groot drempelbevolking (2)
Voorsien dienste wat nie daagliks benodig word nie (2)
Kliënte is bereid om groter afstande te reis om dienste wat hier voorsien word te gebruik (2)
[Enige EEN]

Hoekwinkels in die middestad het 'n klein reikwydte (2)
Benodig 'n klein drempelbevolking (2)
Verkoop basiese goerdere wat daagliks benodig word (2)
Kliënte is nie bereid om groot afstande te reis on basiese goedere te koop nie (2)
[Enige EEN] 2x2 = (4)

d) S (2) 1x2 = (2)

e) S voorsien nie dieselfde verskeidenheid goedere as H nie (2)
S voorsien nie so baie hoë orde funksies soos H nie (2)
[Enige EEN] 1x2 = (2)

f) H (2) 1x2 = (2)

g) Mense is bereid om 'n groter afstand te reis om die hoër orde funksies by H te besoek (2) 1x2 = (2)

[100]

VRAAG 5

5.1.1 a) graslande (2)
b) somer (2)
c) konveksie (2) 3x2 = (6)

5.1.2 a) A (2) 1x2 = (2)
b) B (2) 1x2 = (2)

5.2.1 E - Mpumalanga (1)
F - Limpopo / Noordelike Provinsie (1)
G – Noordwes (1)
H - Vrystaat (1) (4)

5.2.2 Hoëveld / Gematigde (1) (1)

5.2.3 Johannesburg (1) (1)

5.3.1 Water (1) Bewerkbare grond (1) Lug (1)
Voedsel (1) Minerale (1) Woude (1)
Oop ruimtes (1)
[Enige TWEE] (2)

5.3.2 Pretoria as administratiewe hoofstad (2)
Sentralisasie van nywerhede (2)
PWV gebied (2)
Goudmyne (2)
Werksgeleenthede (2)
Beter dienste (2)
Beter infrastruktuur (2)
[Enige TWEE] 2x2 = (4)

5.3.3 Water: Meer water word benodig vir huishoudelike en nywerheids-doeleindes (2)
Grond: Meer mense benodig meer grond vir vestiging (2)
Lug: Meer mense benodig meer vars lug en besoedig lug op 'groot skaal (2)
Voedsel: Moeiliker om voedsel te voorsien as groeiende bevolking (2)
Minerale: Meer mense lei tot meer onttrekking om te voorsien aan nywerhede (2)
Woude: Meer ruimte benodig vir stedelike groei (2)
Oop ruimtes: Benut vir stedelike en nywerheidsgroei (2)
[Enige TWEE) 2x2 = (4)

5.3.4 Desentralisasie van nywerhede na landelike gebiede of ander provinsies (2)
Vertraag bevolkingsgroeikoers (2)
Beperkende maatreëls om rookbesoedeling te verminder (aanvaar voorbeeld) (2)
Interbekken wateroordragskemas (2)
Herwinning van materiale (2)
Verklaar oop ruimtes as beskermde gebiede (2)
Moedig volhoubare ontwikkeling aan (2) [Enige TWEE aanvaar ander] 2x2 = (4)

5.3.5 Voed mense op rondom geleenthede wat minder kinders bied om lewenstandaard te verbeter (2)
Bevolkingsbeleid wat kleiner gesinne en hoër lewenstandaard aanmoedig (2)
Werkskepping om lewenstandaard te verbeter (2)
Geboortebeperkingsprogramme (2)
Wette of belastings om die aantal kinders wat mense wil hê te beperk (2)
Swaar belastings vir ouers met meer as twee kinders (2)
Ouers met meer as twee kinders betaal ekstra vir opvoeding (2)
Geen poligamie (2)
[Enig TWEE aanvaar ander] 3x2 = (6)

5.4.1 Goud (1) (1)

5.4.2 Goue Boog (1) (1)

5.4.3 Geologie – wye verskeidenheid minerale (2)
Minerale soos steenkool naby aardoppervlak en maklik om te onttrek (2)
Lae geotermiese gradient en temperatuur neem nie vinnig toe soos `n mens ondergronds gaan nie (2)
Vaardigheid en vernuf (2)
Hoë vlak van organisasie (2)
Buitelandse belegging (2)
Regeringsteun en beskerming (2)
Devaluasie van geldeenhede (2)
Groot poel geskoolde en ongeskoolde arbeidsmag (2)
Goed ontwikkelde infrastruktuur (2)
Matige klimaat het meer aangename werksomgewing tot gevolg (2)
[Enig TWEE] 2x2 = (4)

5.4.4 Groot afstande tussen myne en hawens (2)
Afhanklikheid van buitelandse markte (2)
Hoë koste aan opleiding en behuising van werkers (2)
Immigrante van ander dele van Suidelike Afrika (2)
Watertekorte (2)
Ondergrondse water oorstroom myne (2)
Hoë temperature in westelike hefte van land (2)
Fluktuerende markpryse (2)
Nie-hernieubare minerale (2)
Ongelukke lei tot sluitings vir lang tye (2)
Negatiewe invloed van mynbou op omgewing (2)
Gesondheidsrisiko's (2)
Arbeidsgeskille en stakings (2)
[Enig TWEE] 2x2 = (4)

5.4.5 Verdien minder met buitelandse handel omdat verwerkte materiaal meer werd is (2)
Suid-Afrika voer die verwerkte materiaal weer in van ander lande teen 'n veel hoër prys (2)
Verminder werksgeleenthede (2)
[Enig TWEE.] 2x2 = (4)

5.5.1 Bruto Binnelandse Produk (2) (2)

5.5.2 Die totale waarde van al die goedere en dienste (1) geproduseer in 'n land oor 'n tydperk van `n jaar (1) [Begrip] (2)

5.5.3 Baie goudmyne (2)
Nywerhede in PWV gebied (2)
Meeste staatsamptenare in Pretoria (2)
Baie maatskappye se hoofkantore in Pretoria en Johannesburg (2)
Wye verskeidenheid werksgeleenthede (2)
Produkte met hoë waarde word vervaardig (2)
Groter koopkrag (2)
[Enige TWEE] 2x2 = (4)

5.5.4 a) Daar is baie geskoolde en ongeskoolde arbeiders in die gebied (2)
Die gebied is ryk aan grondstowwe, b.v.goud,mielies, steenkool en yster (2)
Boerdery aktiwiteite voorsien grondstowwe aan nywerhede (2)
Die vervoernetwerk is uitstekend en goedere kan maklik na ander dele van Suid-Afrika vervoer word (2)
Die groot bevolking in Gauteng voorsien `n mark vir alle vervaardigde produkte (2)
Die naby geleë steenkoolvelde van Mpumalanga voorsien goedkoop termiese elektrisiteit (2)
Water is beskikbaaar vanaf die Tugela-Vaal en Lesotho Hoogland wateroordragskemas (2)
Relatief gelyk oppervlak op die plato (2)
[Enige TWEE] 2x2 = (4)

b) Oorbenutting van water en elektrisiteit lei tot tekorte (2)
Die paaie is onvoldoende vir die toenemende volume van verkeer, met `n gevolglike verkeersopeenhopings / aflewering stadig / werkers laat (2)
Lugbesoedeling neem toe en nywerhede word gedwing om te hervestig buite die dorp as gevolg van lugbesoedelingbeperkings (2)
Die gebied is kwesbaar in tye van politieke krisis of oorloë (2)
Oorbevolking (2)
Tekort aan oop ruimtes vir verdere ontwikkeling (2)
[Enige TWEE] 2x2 = (4)

c) Yster en staal , bv.YSKOR /MITTAL en Hoëveld staal (2)
Ingeniers-en-metaalprosessering, bv.Atlas vliegtuie (2)
Chemiese nywerhede, bv.SASOL (2)
Motormonteeraanlegte in Pretoria en Johannesburg (2)
[Enige EEN aanvaar ander.] 1x2 = (2)

5.5.5 a) Sentralisasie (2)
Verkeersopeenhoping (2)
Stedelike verval (2)
Lugbesoedeling (2)
Geraasbesoedeling (2)
Waterbesoedeling (2)
Vernetiging van die omgewing (2)
Behuisingstekorte \ informele nedersettings (2)
Misdaad (2)
Werkloosheid (2)
Armoede (2)
[Enige TWEE aanvaar ander.] 2x2 = (4)

b) Sentralisasie: Desentraliseer funksies na kleiner dorpe (2)
Vekeersopeenhoping: Verbeter openbare vervoer (2)
Verbied of belas private motors in SSK (2)
Parkeer en saamrygeleenthede (2)
Fleksi-tyd vir werkers (2)
Beter benutting van eenrigtingstrate (2)
Bus- en taxilane (2)
Saamryklubs (2)
Gautrein (2)
Gesinchroniseerde verkeersligte (2)
Tolpaaie (2)
[Aanvaar ander]
Stedelike verval: Voldoende instandhouding van geboue (2)
Stedelike hernuwing (2)
Opknapping (2)
Restourasie (2)
Afbreek en vernuwing (2)
Bewaring van belangrike stedelike argitektuur (2)
Sosiale opheffing (2)
[Aanvaar ander]
Lugbesoedeling: Reguleer koolstofmonoksied vrystelling uit motors (2)
Gebruik meer skoon brandstof (2)
Reguleer besoedeling met wetgewing en boetes (2)
[Aanvaar ander]
Geraasbesoedeling: Strenger regulasies rondom grondgebruik (2)
Proklamasie van groter groengordel gebiede (2)
Die ontwikkeling van verbeterde uit laatstelsels (2)
[Aanvaar ander]
Waterbesoedeling: Maak stedelike strome skoon (2)
Wetgewing rondom die gebruik van rivierfronte (2)
Gereelde toetsing van water (2)
Plaas filters in afvoerslote(2)
[Aanvaar ander]
Vernietiging van die omgewing: Strenger beheer en beplanning van stedelike ontwikkeling (2)
[Aanvaar ander]
Behuising: Werkskepping om `n inkomste te voorsien (2)
Selfbou skemas (2) [Aanvaar ander]

Misdaad: Beter polisiëring (2)
Buurtwag (2)
Morele herleweing (2)
[Aanvaar ander]
Werkloosheid: Lei entrepreneurs op (2) [Aanvaar ander]
Armoede: Selfhelpskemas (2)
Voorsien basiese dienste (2)
Werkskepping (2)
Opvoeding / opleiding (2)
[Aanvaar ander]
[Een oplossing vir elke probleem genoem in Vraag 5.4.5.] 2x2 = (4)

5.6.1 Dit is `n hoofnywerheidsgebied (2)
Daar is `n groot konsentrasie van produktiewe mense, fabrieke en verbruikers (2)
Konsentrasie van goudmynaktiwiteite (2)
[Enige EEN] 1x2 = (2)

5.6.2 Dit verseker dat mense en goedere na enige bestemming binne Suid-Afrika vervoer kan word (2)
Dit verseker ook dat goedere ingevoer en uitgevoer kan word (2)
Kapitaal kan verdien word (2)
[Enige TWEE] 2x2 = (4)

5.6.3 Verkeersopeenhoping (2)
Hoë ongeluksyfer (2) 1x2 = (2)

5.6.4 Ja (2) 1x2 = (2)
Kapitaal wat verdien word kan gebruik word om paaie te bou (2)
Kapitaal wat verdien word kan gebruik word om bestaande paaie in stand te hou (2)
Minder opeenhoping as meer paaie gebou word (2)
Veiliger paaie as paaie in stand gehou word (2)
[Enige EEN rede –aanvaar ander]
OF
Nee (2)
Alternatiewe paaie ervaar opeenhoping (2)
Wil nie betaal en gebruik alternatiewe paaie (2) 2x2 = (4)

5.7.1 X – Oranje / Gariep / Senqu (1)
Y - Tugela (1) (2)

5.7.2 Namibië (1) (1)

5.7.3 Atlantiese Oseaan (1) (1)

5.7.4 Hoë bevolkingsdigtheid vereis water vir huishoudelike gebruik (2)
Toenemende besproeiing by boerdery aktiwiteite langs die Vaalrivier (2)
'n Toename in mynbou aktiwiteite (2)
Vinnige nywerheidsontwikkeling (2)
[Enige TWEE] 2x2 = (4)

5.7.5 Winsaandele op waterverkope (2)
'n Grootliks verbeterde infrastruktuur (2)
Werkskepping gedurende die konstruksiefase (2)
Werkskepping as `n indirekte uitvloeisel van die verwagte groei in toerisme, visvangs, bosbou en besproeiingslandbou (2)
Onafhanklike elektristeitsvoorsiening (2)
[Enige TWEE –aanvaar ander.] 2x2 = (4)

[100]

VRAAG 6

6.1.1	a)	subtropiese woud / Savanna (2)	
	b)	bestaans (2)	
	c)	Oranje-Vis (2)	3x2 = (6)
6.1.2	a)	A (2)	1x2 = (2)
	b)	C (2)	1x2 = (2)
6.2.1	Lesotho (1)		(1)
6.2.2	Indiese Oseaan (1)		(1)
6.2.3	Mosambiek seestroom (1)		(1)
6.2.4	Warm (1)		(1)
6.2.5	a)	Verhoog temperatuur (2)	1x2 = (2)
	b)	Lug wat rus op die warm seestroom is verhit (2) Warm lug beweeg in oor land (2) Dit verhoog temperatuur oor kusgebiede (2) [Enige TWEE]	2X2 =(4)
	c)	Hoë temperature dwarsdeur die jaar (2) Toeriste wil dus hierdie gebied dwarsdeur die jaar besoek (2) Vakansie-oorde / nedersettings ontwikkel langs die kus (2) Hoë temperature bevorder landbou aktiwiteite dwarsdeur die jaar (2) Werk geskep (2) [Enige TWEE aanvaar ander]	2x2 = (4)
	d)	Tersiêre (2)	1x2 = (2)
	e)	Tersiêre voorsien `n diens (2)	1x2 = (2)
6.3.1	Pynappels (1) Sitrusvrugte (1) [Aanvaar voorbeelde]		(2)
6.3.2	Primêre (2)		1x2 = (2)
6.3.3	Grondstowwe word onttrek (2)		1x2 = (2)
6.3.4	a)	Die Oos Kaap is `n droë gebied / gebrek aan water/lae reënval (2)	1x2 = (2)
	b)	Dit sal die uitsette verhoog (2)	1x2 = (2)

c) Meer water is beskikbaar (2)
Groter gebiede kan nou bewerk word (2)
Gebiede wat voorheen nie op geboer kon word nie, kan nou op geboer word (2)
Meer landbouprodukte kan nou geproduseer word / oes vermeerder (2)
[Enige TWEE] 1x2 = (2)

d) Landbou kan nou meer bydra tot die BBP (2) 1x2 = (2)

6.4.1 D - Port Elizabeth (1)
E – Oos Londen (1) (2)

6.4.2 Suid-Afrika se ligging op die mees suidelike punt van Afrika (2)
Halfpad tussen wes Europa en Asië (2)
Ons hawens is die poort na die Europese en Asiatiese markte vir baie lande in Suidelike Afrika (2)
Groot tenkskepe wat nie deur die Suezkanaal verby kan gaan nie gebruik ons hawens as belangrike oorstop punte (2)
Gedurende tye van politieke onstabiliteit in die Midde-Ooste, trek Suid-Afrikaanse hawens ekonomiese voordeel daaruit (2)
[Enige TWEE] 2x2 = (4)

6.4.3 Groot vragskepe wat stop: hervul met petrol(2)
koop voorrade(2)
herstel skepe / droog dokke (2)
Skep werksgeleenthede in die hawens(2)
Geld word in die hawens spandeer(2)
Bevorder handelsbande(2)
Vaardigheidsontwikkeling (2)
[Enige TWEE– Aanvaar ook ander] 2x2 = (4)

6.5.1 Boere produseer genoeg voedsel (1) vir hul families se behoefte (1) [Begrip] (2)

6.5.2 Tradisionele boerderymetodes (2)
Klein plaaseenhede (2)
Gebruik hout as brandstof (2)
Geen meganisasie (2)
Geen omheining / Grond nie verdeel (2)
[Enige EEN] 1x2 = (2)

6.5.3 Boer produseer net vir eie gebruik (2)
Geen surplus word geproduseer (2)
Geen handel (2)
Geen kapitale inkomste (2)
Gebrek aan tegnologie (2)
[Enige TWEE] 2x2 = (4)

6.5.4 Stig skole om boere op te lei (2)
Moderne masjinerie (2)
Beter boerderymetodes (2)
Gebruik kunsmis (2)
Spesialisering (2)
Wetenskaplike boerdery metodes (2)
Finansiële bystand van regering (2)
[Enige TWEE] 2x2 = (4)

6.5.5 Goeie somer reënval op die Hoëveld (2)
Winter reënval in die suidwes-Kaap (2)
Verskeidenheid klimaatstreke maak verbouing van verskeidenheid produkte moontlik (2)
Permanente riviere en grondwater verseker goeie landbou (2)
Vrugbare grond (2)
Beter navorsing en opleiding het boerderymetodes verbeter (2)
Nywerheidsgroei het 'n mark vir landbouprodukte geskep (2)
Goeie pad- en spoornetwerk maak dit moonlik vir landbouprodukte om die mark te bereik (2)
Die vermoë om die waarskynlikheid van droogtes te voorspel het landbou-verliese aansienlik verminder (2)
Nuwe plant- en dierspesies is ontwikkel (2)
Nuwe maniere om siektes en insekpeste te bestry is ontwikkel (2)
Sedert 1994 is meer lande bereid om produkte van Suid-Afrika aan te koop (2)
Na onderhandelings met die EU in 1999 geniet Suid-Afrikaanse landbou nou tarieflose voorkeure van die Europese mark op ingelegde vrugte, snyblomme, wyn en suiwelprodukte (2)
Die Landbank voorsien lenings teen lae rentekoerse aan voorheen benadeelde mense om hulle te help om te begin boer (2)
Landbou is gemeganiseerd (2)
Landbou is gekommersialiseerd (2)
Landbou is gespesialiseerd (2)
Landbou is markgerig (2) [Enige TWEE] 2x2 = (4)

6.6.1 Toename in die vernietiging (1) van natuurlike plantegroei (1)[Begrip] (2)

6.6.2 Mense benodig meer grond vir nedersettings (2)
Mense benodig meer hout vir vure (2)
Mense benodig meer grond vir landbou (2)
Mense benodig meer grond vir nywerhede (2)
Mense benodig meer grond vir vervoer en kommunikasie (2)
[Enige TWEE] 2x2 = (4)

6.6.3 Minder plante om voedsel te produseer (2)
Plantspesies word vernietig / uitgeroei (2)
Organismes afhanklik van plante vir voedsel verminder (2)
Organismes word vernietig / uitgeroei (2)
Habitat van organismes vernietig (2)
Gronderosie neem toe (2)
Grondvrugbaarheid neem af (2)
Biodiversiteit verminder (2)
Lei tot wanbalans in ekosisteem (2)
[Enige TWEE – Aanvaar ander] 2x2 = (4)

6.6.4 Verseker voldoende voortplanting deur groot genoeg stukke plantegroei onaangeraak te laat (2)
Kap slegs dooie bome af (2)
Kap slegs bome af as dit noodsaaklik is (2)
Herplant inheemse bome as dit afgekap word (2)
Stel wetgewing in om inheemse bome teen vernietiging te beskerm (2)
Behou vleilande in hulle natuurlike toestand (2)
Moet nie plantegroei verwyder of bome binne 10m van rivieroewers verwyder nie (2)
Ontwikkel botaniese tuine (2)
Ontwikkel saadbanke (2)
[Enige TWEE] 2x2 = (4)

6.7.1 Verworwe Immuniteits Gebrek Sindroom (2) [Aanvaar Engels] (2)

6.7.2 a) Afname in <u>bevolkingsgetalle</u> (2)
Meer mense sal in die toekoms aan MIV/Vigs sterf (2) 2x2 = (4)

b) <u>Ekonomiese ontwikkeling</u> sal belemmer word (2)
Ekonomies aktiewe bevolking word meer besmet (2)
arbeidsmag verminder (2)
Koste / regeringsuitgawes.
[Aanvaar voorbeelde van impak op ekonomiese ontwikkeling] 2x2 = (4)

c) <u>Gebroke families</u> of kinders neem die ouerrol oor (2)
Moeder en (of) vader sterf en wesies bly agter (2)
Oumense / grootouers sien om na kinders (2) 2x2 = (4)

6.7.3 Onthouding (2)
Beoefen veilige seks / voorsien kondome (2)
Voed mense op (2)
Monogamie (2)
Bly getrou aan een seksuele maat (2)
Anti-retrovirale medikasie om moeder na kind oordrag te verminder (2)
Veldtogte wat deur die regering ondersteun word (2)
Naald uitruilskemas (2)
Maak Vigs 'n aanmeldbare siekte (2)
[Enige TWEE] 2x2 = (4)

[100]
GROOTTOTAAL: 300