



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 11

NOVEMBER 2019

**GEOGRAPHY P1
MARKING GUIDELINE**

MARKS: 225

This marking guideline consists of 14 pages.

SECTION A: CLIMATOLOGY AND GEOMORPHOLOGY**QUESTION 1**

- 1.1 1.1.1 G (parallelism) (1)
- 1.1.2 A (revolution) (1)
- 1.1.3 D (insolation) (1)
- 1.1.4 B (orbit) (1)
- 1.1.5 E (terrestrial radiation) (1)
- 1.1.6 I (solstice) (1)
- 1.1.7 C (equinox) (1)
- 1.1.8 H (circle of illumination) (1) (8 x 1) (8)
- 1.2 1.2.1 A (1)
- 1.2.2 B (1)
- 1.2.3 C (1)
- 1.2.4 B (1)
- 1.2.5 D (1)
- 1.2.6 D (1)
- 1.2.7 C (1) (7 x 1) (7)
- 1.3 1.3.1 These winds affect small/certain areas (1) (1 x 1) (1)
- 1.3.2 Weather conditions during winter and summer are different (2)
 Pressure systems change over the land in winter and summer (2)
 The wind changes direction during the seasons due to the difference
 of the pressure systems over the land (2)
[ANY ONE] (1 x 2) (2)
- 1.3.3 High pressure over central Asia during winter (2)
 Air moves from the interior to the ocean and descends down the
 Himalayan Mountains (2)
 The air heats up adiabatically and a hot, dry wind reaches India (2)
[ANY TWO] (2 x 2) (4)

- 1.3.4 During summer the ITCZ moves southwards (2)
 Land gets heated faster than the ocean (2)
 Low pressure develops over the land and a high pressure over the ocean (2)
 Moist air is pulled towards the land from the ocean, bringing torrential downpours (2)
[ANY TWO] (2 x 2) (4)
- 1.3.5 Loss of lives due to heavy rainfall (2)
 Flooding destroys homes (2)
 Flooding of agricultural land causes food shortages (2)
 Essential infrastructure is washed away (2)
[ANY TWO] (2 x 2) (4)
- 1.4 1.4.1 Little or no rainfall over a long period of time (1)
[CONCEPT] (1 x 1) (1)
- 1.4.2 **Hydrological drought**
 City to run out of water – April 21 (1)
- Meteorological drought**
 Beating sun, without chance of rainfall (1) (2 x 1) (2)
- 1.4.3 Water storage facilities run dry and no irrigation is possible (2)
 This will cause a decrease in agricultural yield, therefore less food available for inhabitants of Cape Town (2)
 (2 x 2) (4)
- 1.4.4 Impose water restrictions in urban areas (2)
 Construct more water storage facilities like dams (2)
 Engage in desalination projects as another source of water (2)
 Examine the possibility of inter-basin water schemes (2)
 Research into El Niño weather and climate change (2)
 Recycling of water (2)
[ANY FOUR] (4 x 2) (8)
- 1.5 1.5.1 Intrusive igneous rocks occur when molten rock solidifies beneath the earth surface (1) and extrusive igneous rock occur when molten rock solidifies above the earth surface (1) (2 x 1) (2)
- 1.5.2 **X** – Laccolith (1)
Y – Dyke (1) (2 x 1) (2)
- 1.5.3 Magma is squeezed between layers of rock close to the surface (1)
 The pressure of the magma causes the rock strata to 'dome' upwards (1) (2 x 1) (2)

- 1.5.4 Occurs at great depths beneath the earth's surface (1)
Is a large mass of rock, without any layers (It is massive) (1)
It does not have a floor (1)
[ANY TWO] (2 x 1) (2)
- 1.5.5 (a) Granite (1) (1 x 1) (1)
(b) Intrusive (1) (1 x 1) (1)
(c) Exfoliation (1 x 1) (1)
(d) Mass magma forces rock layers upwards (2)
When overlaying sedimentary rocks are eroded, the intrusion is exposed as a dome on the surface (2) (2 x 2) (4)
- 1.6 1.6.1 LC King (1) (1 x 1) (1)
- 1.6.2 Slope erodes parallel (1)
Height remains the same (1) (2 x 1) (2)
- 1.6.3 An arid climate promotes backward erosion and therefore slope retreat (2)
A humid climate results in slope decline (2)
Temperature differences between seasons result in slope replacement (2)
[ANY TWO] (2 x 2) (4)
- 1.6.4 **Slope decline**
Steep slopes at the beginning of the erosion process (2)
Due to sheet flow in humid regions the upper slopes eroded faster than the rest of the slope (2)
The angle of the slope declines (2)
The slope loses height and steepness and it will eventually result in an almost flat eroded peneplain (2)
- Slope retreat**
Due to headward erosion the upper steep escarp slope moves backwards and parallel to the slope (2)
The angle of all the slope elements stays the same (2)
There is no reduction in the angle of the slope (2)
A concave pediment forms at the lower parts of the cliff (2)
As the slope move backwards, the pediment gets larger (2)
[Any FOUR – THE DIFFERENCE BETWEEN THE THEORIES MUST BE CLEARLY INDICATED] (4 x 2) (8)
- [75]**

QUESTION 2

- 2.1 2.1.1 D (Coriolis) (1)
- 2.1.2 H (geostrophic) (1)
- 2.1.3 F (Chinook) (1)
- 2.1.4 B (Mediterranean) (1)
- 2.1.5 A (desertification) (1)
- 2.1.6 E (pressure gradient) (1)
- 2.1.7 C (desert) (1) (7 x 1) (7)
- 2.2 2.2.1 A (1)
- 2.2.2 A (1)
- 2.2.3 B (1)
- 2.2.4 A (1)
- 2.2.5 B (1)
- 2.2.6 A (1)
- 2.2.7 B (1)
- 2.2.8 A (1) (8 x 1) (8)
- 2.3 2.3.1 A change in the usual pattern of water and air circulation in the Pacific Ocean/climate change brought about by warmer conditions in the Pacific Ocean (1)
[CONCEPT] (1 x 1) (1)
- 2.3.2 (a) Tropical easterlies/Trade winds (1) (1 x 1) (1)
- (b) Walker circulation (1) (1 x 1) (1)
- 2.3.3 Weakening of the trade winds (2)
 Stronger westerly winds over the south Pacific Ocean (2)
 High pressure develops over Australia instead of a low pressure (2)
 Low pressure with heavy rain occurs over the central Pacific Ocean instead of Australia (2)
[ANY TWO] (2 x 2) (4)

- 2.3.4 Cold waters cause upwelling (2)
This brings nutrients for fish to the surface (2)
Fishing industry is highly lucrative (2)
[ANY TWO] (2 x 2) (4)
- 2.3.5 Decrease in rainfall causes drought in Australia (2)
There is a significant decrease in agricultural yield (2)
This leads to lower export of crops (2)
It will be more expensive to produce crops (2)
[ANY TWO] (2 x 2) (4)
- 2.4 2.4.1 Winds that are generated by global air circulation and blow over large areas of the earth's surface (1)
[CONCEPT] (1 x 1) (1)
- 2.4.2 The planetary winds are responsible for the tri-cellular arrangement (2)
(1 x 2) (2)
- 2.4.3 The winds deflect to the left in the southern hemisphere (2)
The winds deflect to the right in the northern hemisphere (2) (2 x 2) (4)
- 2.4.4 The high temperature at the equator causes air to be heated and to rise (2)
The rising air cools and sinks back to the surface at the 30° latitude line (2)
At the 30° latitude some of the surface air flows towards the 60° latitude line and some back towards the equator (2)
The closed circulation of air between 10° and 30° latitudes is known as the Hadley cell (2)
The sinking surface air at the poles is cold and moves towards the middle latitudes at 60° (2)
Air converges at the 60° where the colder air from the poles forces the warmer air 30° latitudes to rise (2)
In the upper air regions at 60° latitudes, the air diverges towards the poles and other moves towards 30° latitudes (2)
Two circulating cells develop, between 30° and 60°, the Ferrell cell (2)
And between 60° and 90° the polar cell (2)
[ANY FOUR – DEVELOPMENT OF ALL THREE CELLS MUST BE DESCRIBED] (4 x 2) (8)
- 2.5 2.5.1 Describes how gravity causes weathered material to move down a slope (1)
[CONCEPT] (1 x 1) (1)
- 2.5.2 No vegetation on slope (1)
Steep slope (1)
[ANY ONE] (1 x 1) (1)
- 2.5.3 Rocks and stones piled up on the bottom of a slope (1) (1 x 1) (1)
- 2.5.4 Rockfalls occur at a faster speed than landslides (1 x 2) (2)

- 2.5.5 May cause death and injury (2)
 Damage to property and buildings (2)
 Damages infrastructure (2)
 Damages to agricultural land (2)
[ANY TWO] (2 x 2) (4)
- 2.5.6 Catch fences to catch falling rocks (2)
 Concrete impact protection canopies (2)
 Rock barring – removing loose or dangerous rocks (2)
 Build retaining walls (2)
 Introduce plant species with strong root systems to bind upper layers
 of soil together (2)
[ANY THREE] (3 x 2) (6)
- 2.6 2.6.1 (a) mesa (1)
 (b) butte (1) (2 x 1) (2)
- 2.6.2 They are both subjected to scarp retreat or back wasting (1) (1 x 1) (1)
- 2.6.3 Hard and resistant (2) (1 x 2) (2)
- 2.6.4 The cap rock does not erode downwards and allows the landscape to
 maintain its height (2) (1 x 2) (2)
- 2.6.5 **BENEFIT**
 Impressive scenery makes these landscapes a tourist attraction (2)
 Recreational activities such as hiking or adrenaline sports can be
 practised on these landscapes (2)
 Livestock farming can be practiced on the pediplains (2)
- OBSTACLES**
 Arid climate in these landscapes makes crop farming impossible (2)
 It is difficult to access water for irrigation from these landscapes as the
 slopes of the canyon are too rugged (2)
 Settlements are difficult to develop (2)
 Difficult to develop infrastructure (2)
[ANY FOUR – MUST REFER TO BENEFITS AND OBSTACLES]
 (4 x 2) (8)
[75]

QUESTION 3

- 3.1 3.1.1 Sustainability (1)
- 3.1.2 Core-periphery (1)
- 3.1.3 Free market (1)
- 3.1.4 Free market (1)
- 3.1.5 Sustainability (1)
- 3.1.6 Core-periphery (1)
- 3.1.7 Free market (1)
- 3.1.8 Core-periphery (1) (8 x 1) (8)
- 3.2 3.2.1 C (non-renewable) (1)
- 3.2.2 H (acid rain) (1)
- 3.2.3 G (uranium) (1)
- 3.2.4 D (renewable) (1)
- 3.2.5 F (carbon footprint) (1)
- 3.2.6 A (Kyoto protocol) (1)
- 3.2.7 B (resource) (1) (7 x 1) (1)
- 3.3 3.3.1 Help given by one country/organisation to another country
[CONCEPT] (1 x 1) (1)
- 3.3.2 Food (1)
Medicines (1)
Money (1)
Technology (1)
Services (1)
[ANY ONE] – ACCEPT EXAMPLES OF THE ABOVE ANSWERS
(1 x 1) (1)
- 3.3.3 Developed (MDC) (1) (1 x 1) (1)
- 3.3.4 He is the one giving aid (1)
He is the one taking resources in return (1)
The other person (developing) in the cartoon is poorly dressed (1)
The poorly dressed man represents Africa, as indicated by the tag
around his neck (1)
[ANY TWO] (2 x 1) (2)
- 3.3.5 Donor countries grants aid with conditions attached (2)
Aid benefits donor country more than the recipient country as natural
resources will be depleted (2)
[ANY ONE] (1 x 2) (2)

- 3.3.6 Technology is supplied to assist with development projects (2)
 This will create jobs (2)
 People learn new skills, as they are trained in the new technology (2)
 Donor countries provide expert advice and help deal with problems (2)
 Technical development helps the growth of secondary and tertiary sectors in a recipient country (2)
[ANY FOUR] (4 x 2) (8)
- 3.4.1 Rapid industrialisation in a country to export goods (1)
[CONCEPT] (1 x 1) (1)
- 3.4.2 (a) Fuels (1) (1 x 1) (1)
 (b) Manufactured goods (1) (1 x 1) (1)
- 3.4.3 Both countries have an extremely high shift in demand from China (2)
 (1 x 2) (2)
- 3.4.4 **2010**
 More exports from sub-Saharan Africa to China (2)
 Sub-Saharan Africa had a favourable balance of trade against China (2)
[ANY ONE]
- 2016**
 More imports than exports from China (2)
 Sub-Saharan Africa has a negative balance of trade against China (2)
[ANY ONE]
- [BOTH 2010 AND 2016 MUST BE DESCRIBED]** (2 x 2) (4)
- 3.4.5 They will benefit their own raw materials and export it at higher prices (2)
 Less dependence on higher priced manufactured imports (2)
 More finances for industrialisation or industries (2)
 They will avoid high import costs (2)
 Skills of workers increase as more industries develop due to the multiplier effect (2)
[ANY THREE] (3 x 2) (6)
- 3.5.1 Rationing of electricity to consumers over a short period of time (1)
[CONCEPT] (1 x 1) (1)
- 3.5.2 Maintenance of power plants (1)
 Coal shortages (1)
 Businesses open on the 15th, large users of electricity (1)
 Damages to power transmission links (1)
[ANY TWO] (2 x 1) (2)

- 3.5.3 It causes environmental despoliation as coal has to be mined to be burned in these stations (2)
 Solid waste produced by coal-burning power stations is dumped and toxic matter seeps into ground water (2)
 Carbon dioxide released contributes to climate change (2)
 Sulphur dioxide and nitrogen oxides cause acid rain (2)
 Acidic rainwater flows into streams and into groundwater (2)
 Hydrocarbons contribute to smog (2)
 It causes air pollution (2)
[ANY TWO] (2 x 2) (4)
- 3.5.4 There is an abundant amount of coal mined in South Africa (2)
 The country has not invested enough in the use of other sources of conventional and non-conventional sources of energy (2) (2 x 2) (4)
- 3.5.5 It would cause unemployment of people employed in the mining industry as the demand of coal decreases (2)
 Coal mining towns would suffer a decline in their economy and cause a decrease in population numbers (2)
 Businesses will suffer because of a reduction in power output (2)
 Reskilling and training of workers have financial implications (2)
[ANY TWO] (2 x 2) (4)
- 3.6 3.6.1 The loss or removal of fertile topsoil at greater rate than it can form again (1)
[CONCEPT] (1 x 1) (1)
- 3.6.2 **A** – Terracing (1)
- B** – Crop rotation (1) (2 x 1) (2)
- 3.6.3 Prevents overgrazing over the area (2)
 The rotational method gives soil a period to recover (2) (2 x 2) (4)
- 3.6.4 Prevents less soil erosion, therefore soil stays fertile for longer (2)
 Maintaining or producing higher yields is possible (2)
 Using less water or irrigation as the water table is maintained (2)
 The development of dongas is less, therefore better/safer transport network (2)
 Due to fertile topsoil, the quality livestock/crops are good, ensuring higher profits (2)
[ANY FOUR] (4 x 2) (8)
- [75]**

QUESTION 4

- 4.1 4.1.1 H (human development index) (1)
- 4.1.2 E (gross national product) (1)
- 4.1.3 F (gender inequality index) (1)
- 4.1.4 C (balance of trade) (1)
- 4.1.5 B (balance of payments) (1)
- 4.1.6 A (gross domestic product) (1)
- 4.1.7 D (Gini co-efficient) (1) (7 x 1) (7)
- 4.2 4.2.1 Biofuel (1)
- 4.2.2 Wind energy (1)
- 4.2.3 Solar energy (1)
- 4.2.4 Geothermal energy (1)
- 4.2.5 Biofuel (1)
- 4.2.6 Solar energy (1)
- 4.2.7 Wave-energy (1)
- 4.2.8 Wind energy (1) (8 x 1) (8)
- 4.3 4.3.1 A trade barrier is a structure or regulation imposed by governments to control trade (1)
[CONCEPT] (1 x 1) (1)
- 4.3.2 Tariffs (1)
 Quotas (1)
 Sanctions (1)
 Embargo's (1)
 Subsidies (1)
[ANY TWO] (2 x 1) (2)
- 4.3.3 He wants his products to be sold without paying taxes (1)
 His products will thus be cheaper than local products (1)
 He wants as many of his country's products to be sold in other countries (1)
[ANY TWO] (2 x 1) (2)

- 4.3.4 To protect jobs in their country (1)
 To protect local products from foreign competition (1)
 To encourage industrial growth in their country (1)
 To protect their country from inferior / dangerous products (1)
[ANY TWO] (2 x 1) (2)
- 4.3.5 They would be able to trade competitively (2)
 They would be actively involved in determining fair prices for their products (2)
 It would result in social development for impoverished communities (2)
 It would guarantee better working conditions for workers (2)
 They would share in profits (2)
 It would encourage gender equality (2)
 Focus would be on environmental sustainability (2)
 It would result in infrastructural development in developing countries (2)
[ANY FOUR] (4 x 2) (8)
- 4.4 4.4.1 Systems linking all countries of the world together/Economic, social, political and cultural activities of countries across the world are interconnected (1)
[CONCEPT] (1 x 1) (1)
- 4.4.2 More people are able to leave their countries and be employed in a global workforce (1)
 Easier to move between countries (1)
 Improved telecommunication allows for an interconnected workforce (1)
 Transference of finances is easier to family members (1)
 Trade and political relationship between countries is better (1)
[ANY ONE] (1 x 1) (1)
- 4.4.3 (a) multinational corporations (1) (1 x 1) (1)
- (b) Samsung (1)
 Nokia (1)
 Microsoft (1)
 BMW (1)
 CITI (1)
 HP (1)
 Google (1)
 Marlboro (1)
 Gillette (1)
 McDonalds (1)
 Coca Cola Nescafe (1)
 Walt Disney (1)
[ANY TWO] (2 x 1) (2)

- (c) Globalisation has facilitated the development of MNCs in different parts of the world (2) (1 x 2) (2)
- (d) Jobs are created (2)
 Local people are trained and skills are transferred (2)
 Better salaries and working conditions are offered (2)
 Poverty is reduced (2)
 Increased access to spread of knowledge and innovations (2)
 Some of the profits from MNCs are retained and reinvested in the host country (2)
 MNC's establish partnerships with communities which leads to socio-economic upliftment (2)
[ANY TWO] (2 x 2) (4)
- 4.4.4 Great demand for raw materials leads to depletion (2)
 Exploitation of resources leads to ecological damage (2)
 Globalisation leads to excessive amounts of air, water and land pollution (2)
 Construction of new infrastructure harms the environment (2)
[ANY TWO] (2 x 2) (4)
- 4.5 4.5.1 South Africa's sustainable development in action (1)
 A system of economic activities resulting in improved human well-being, while not exposing future generations to significant environmental risks or ecological scarcities (1)
[ANY ONE] (1 x 1) (1)
- 4.5.2 The Green Economy adopts environmentally friendly practices that centre on conservation and preservation of the environment (2)
 (1 x 2) (2)
- 4.5.3 Changing its reliance on non-renewable energy sources like coal to renewable resources of energy (2)
 Using available energy more efficiently (2)
 Reducing our carbon footprint (2)
[ANY TWO] (2 x 2) (4)
- 4.5.4 The government can allow renewable power producers to supply electricity to industries (2)
 They can introduce subsidies to encourage industries to switch to greener technologies (2)
 They can fine industries who emit excessive amounts of smoke into the atmosphere (2)
 Encourage industries through self-regulation to reduce carbon output by committing them to sign agreements (2)
 Developing the green economy by encouraging consumers to make ethical choices when purchasing products from industries that have high carbon outputs (2)
[ANY FOUR] (4 x 2) (8)

4.6	4.6.1	Conventional (1)	(1 x 1)	(1)
	4.6.2	This energy source is reliant on non-renewable resources (1)	(1 x 1)	(1)
	4.6.3	'Wait! Stop! Built it back up! (1)	(1 x 1)	(1)
	4.6.4	Nuclear power is a cleaner energy source because it produces fewer greenhouse gases than fossil fuels (2)	(1 x 2)	(2)
	4.6.5	Fossil fuels are non-renewable and became exhausted (2) Government cannot subsidise the extraction of fossil fuels anymore (2) International prices of fossil fuels increased (2) High consumption/use due to increased population numbers and industrialisation (2) [ANY TWO]	(2 x 2)	(4)
	4.6.6	Lower long-term maintenance costs at the plant (2) Fewer costly clean-up operations because of less pollution during energy generation (2) Nuclear power's output is much higher, therefore less energy needed than other energy sources (2) Maintenance of the plant creates sustainable employment opportunities (2) [ANY THREE]	(3 x 2)	(6)
			TOTAL:	225
				[75]