basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 11

GEOGRAPHY P1

EXEMPLAR 2013

MEMORANDUM

MARKS: 300

This memorandum consists of 12 pages.

SECTION A

QUESTION 1

1.1.1	Coriolis force (2)	1x2 (2)
1.1.2	global air circulation (2)	1x2 (2)
1.1.3	pressure gradient force (2)	1x2 (2)
1.1.4	geostrophic wind (2)	1x2 (2)
1.1.5	trade winds (2)	1x2 (2)
1.2.1	batholith (2)	1x2 (2)
1.2.2	1 - laccolith (2) 2 - dyke (2) 7 - lopolith (2)	3x2 (6)
1.2.3	dome (2)	1x2 (2)
1.3.1	A wind that shows a complete reversal in direction seasonally (2) [Concept]	1x2 (2)
1.3.2	January – March: southwesterly (2) June – September: northeasterly (2)	2x2 (4)
1.3.3	Increase in humidity/Increase in moisture in atmosphere (2) Increased cloud cover (2) Increased rainfall (2) Fall in air pressure (2) [Any TWO]	2x2 (4)
1.3.4	Causes heavy rainfall (2) Flooding (2) Deaths (2) [Any ONE]	1x2 (2)
1.3.5	Reduces rainfall (2) Droughts (2) Famine (2) [Any ONE]	1x2 (2)
1.4.1	A period of below-average rainfall (2) [Concept]	1x2 (2)
1.4.2	When the amount of moisture in the air drops (2) Changes in the ocean-atmosphere cycle/El Niño event (2) Shifts in wind patterns (2) Locations in high pressure belts (2) Poor land use practices that affect the ability of the land to catch and store water (2) Wasteful water usage (2) [Any TWO. Accept other]	2x2 (4)

1.4.3 Crops fail (2)
Livestock die (2)
Food shortages/Famine (2)
Malnutrition (2)
Mass migration (2)
Increased urbanisation leading to increased social stress (2)
Shortage of water in industries (2)
Loss of jobs resulting in poverty (2)
Reduced hydro-electricity generation (2)
Wars and conflict over resources (2)
Drought fuel wildfires (2)
Reduce biodiversity (2)
[Any TWO] 2x2 (4)

1.4.4 Developing countries have many people living in rural areas who depend on the land for their livelihood/subsistence farming (2)
Not variety of crops to fall back on (2)
No food in storage (2)
No capital to import (2)
Little insurance against droughts (2)
[Any TWO. Accept other] 2x2 (4)

1.4.5 Building dams to store water (2)
Could seeding to artificially increase rainfall (2)
Desalination of sea water (2)
Crop rotation to protect soil to store water (2)
Water restrictions (2)
Recycling (2)
Redirecting water to provide for irrigation in areas prone to drought (2)
Harvesting rain water from rooftops (2)
Development of sustainable agricultural practices (2)
Education to change attitude towards water usage (2)
Increase price of water to reduce usage (2)
[Any SIX. Accept other sustainable strategies] 6x2 (12)

1.5.1 Landslide refers to a sudden movement of a block of the land surface (2)
[Concept] 1x2 (2)

1.5.2 On hill slopes (2) 1x2 (2)

1.5.3 Heavy rainfall (2)
Earthquakes (2)
Removal of part of slope due to construction (2)
[Any TWO] 2x2 (4)

1.5.4 A landslide may fall across a river, damming the water (2)
A new lake can form (2)
The above could cause flooding (2)
Can cause great destruction across a wide area of habitable land (2)
Destruction of vegetation (2)
Houses destroyed (2)
Farmland/crops destroyed (2)
People killed/buried alive (2)
[Any THREE. Accept other] 3x2 (6)

1.5.5 Using wire to hold the rock in place (2)
Building gabians at the base of the slope (2)
Spraying concrete on the side of the slope to stabilize the rock slope (2)
Drilling bolts into the side of the hill slope (2)
Covering slopes with nets (2)
Avoid development along unstable slopes (2)
Using early signs to detect land movements and instability of slopes (2)
Completing environmental impact study before development on steep slopes (2)
Closing roads to ensure the safety of people when slopes become unstable (2)
Artificial rockfalls to stabilise slopes (2)
Building roofs over roads along steep slopes (2)
[Any SIX. Accept other sustainable measures] 6x2 (12)

1.6.1 A ridge that develop in tilted sedimentary rock characterised by a gentle slope and a steep slope (2)
[Concept] 1x2 (2)

1.6.2 **A** forms when the rock strata in the centre are pushed upward (2)
B forms when the rock strata in the centre are pushed downward (2)
[Concept] 2x2 (4)

1.6.3 Dip slope is gentle (2)
Scarp slope is steep (2) 2x2 (4)

1.6.4 Farming takes place in the cuesta valleys situated between the ridges, as the flat surface is covered in fertile soil (2)
Where cuesta basins form, artesian wells, which are sources of groundwater, are found (2)
These basins can also form oil traps (2)
These ridges are of strategic importance, as they can protect settlements on the cuesta valley floors during times of war (2)
The ridges form excellent lookout points (2)
Many outdoor activities are concentrated in these landscaping e.g. hang gliding and hot air ballooning (2)
[Any TWO] 2x2 (4)

[100]

QUESTION 2

2.1.1	solstice (2)	1x2 (2)
2.1.2	long day and short night (1)	1x2 (2)
2.1.3	winter (1)	1x2 (2)
2.1.4	equal/same length/both 12 hours (1)	1x2 (2)
2.1.5	orbit (1)	1x2 (2)
2.2.1	false (2)	1x2 (2)
2.2.2	true (2)	1x2 (2)
2.2.3	false (2)	1x2 (2)
2.2.4	true (2)	1x2 (2)
2.2.5	false (2)	1x2 (2)
2.3.1	Warming of sea-surface temperatures in the equatorial Pacific Ocean (2)	1x2 (2)
2.3.2	Ocean temperatures increased (2) Glaciers broke loose from continents (2) Glaciers drifted in the equatorial Pacific Ocean (2) [Any TWO]	2x2 (4)
2.3.3	Detailed study of El Niño event (2) Knowledge of cyclic occurrence of El Niño (2) Ship captains are made aware of possibility of drifting ice bergs during El Niño event (2) [Any TWO]	2x2 (4)
2.3.4	Drought and bush fires (2) Crops fail causing starvation (2) Drought, fresh water shortages (2) Tropical cyclones (2) Fish industry devastated (2) Floods and mud slides/land slides (2) Downpours causing casualties and property damage (2) Drought, diseases, malnutrition (2) [Any THREE]	3x2 (6)
2.4.1	The process which turns productive land into non-productive desert as a result of poor land-management (2) [Concept]	1x2 (2)
2.4.2	Overgrazing (2) Constructing boreholes, windmills and water points (2) Farming marginal land (2) Poor grazing management (2) Incorrect irrigation practices (2) Population increase (2) Poverty (2) Collecting fuel wood (2) [Any ONE]	1x2 (2)
2.4.3	Greatly threatened/50% threatened (2) Moderate risk in Karoo area (2) High risk in grassland area (2) Desert expanding eastwards (2) [Any TWO]	2x2 (4)

2.4.4 Desertification reduces the ability of land to support life (2)
Affect domestic animals (2) and agricultural crops (2)
Reduction food (2)
Poverty sets in (2)
[Any TWO. Accept other impacts on economy] 2x2 (4)

2.4.5 The number of animals on the land must be reduced (2)
Reseeding may be necessary in badly degraded areas (2)
Farmers should change farming methods to suit the land and soil (2)
Good land management in semi-arid areas (2)
Take part in the activities of conservation groups (2)
Bring overgrazing and land mismanagement to the attention of authorities (2)
Set up schemes to save water in your community (2)
[Any SIX. Accept other sustainable strategies] 6x2 (12)

2.5.1 **A** - dome (2)
B - tor/rock castle (2) 2x2 (4)

2.5.2 Batholith/Laccolith (2) 1x2 (2)

2.5.3 Exposed batholith/laccolith subjected to exfoliation (2)
Surface heats up quicker than inside (2)
Outer layers flake/peel off (2)
Rounded dome remains (2)
[Any THREE] 3x2 (6)

2.5.4 Cooling below the Earth's contracted, leaving many, mainly vertical cracks in granite (2) These allowed water circulation to great depths, which both chemically and mechanically changed the rock surrounding the cracks (2)
Differential weathering takes place (2)
As the granite became exposed, the released pressure resulted in horizontal bedding planes developing in the rock (2)
Further chemical weathering by circulating water, and later by acidic rainwater, caused more weathering along the lines of these joints (2)
Erosion, most likely by river action, washed away all the weathered rock (2)
It would leave the more resistant core rocks behind (2)
[Any SIX] 6x2 (12)

2.6.1 **A** - crest/waxing slope (2)
B - cliff/free fase/scarp (2)
C - talus/scree/debris/constant slope (2)
D - pediment (2) 4x2 (8)

2.6.2 **A** convex (2)
soil creep (2)
top of slope (2)
C consist of weathered material (2)
angle of approximately 35° (2)
slope remains constant (2)
[Any ONE for each of **A** and **C**] 2x2 (4)

2.6.3 Gentle slope (2)
Covered with soil layer (2) 2x2 (4)

[100]

SECTION B

QUESTION 3

3.1.1 B (1)
3.1.2 A (1)
3.1.3 D (1)
3.1.4 C (1)
3.1.5 E (1) 5x2 (10)

3.2.1 Natural (2) 1x2 (2)
3.2.2 Abiotic (2) 1x2 (2)
3.2.3 Eluviation (2) 1x2 (2)
3.2.4 Renewable (2) 1x2 (2)
3.2.5 Gravity (2) 1x2 (2)

3.3.1 Raindrop splash (2)
Water run-off (2) 2x2 (4)
3.3.2 Raindrops loosen soil (2)
Run-off transport loosened soil downslope (2) 2x2 (4)
3.3.3 Soil degradation (2)
Fertile soil deposited in dams decreasing the storage volume (2)
Eutrophication (2)
Soil erosion destroys the habitat of organisms and insects (2)
Soil erosion can scar the land (2)
Rills and gullies develop (2)
[Any THREE. Accept other] 3x2 (6)
3.3.4 Use windbreaks (2)
Contour ploughing (2)
Crop rotation (2)
Rotational grazing (2)
Increase vegetation cover (2)
Plant groundcover between row crops (2)
Protect grasslands (2)
Drainage basin management (2)
Conserving rivers and wetlands (2)
Public education (2)
[Any SIX. Accept other sustainable strategies] 6x2 (12)

3.4.1 Coal is non-renewable (2)
Once used it cannot be replaced and no electricity can be generated (2) 2x2 (4)
3.4.2 Environmental despoliation (2)
Produce solid wastes (2)
Produce greenhouse gases when it's burnt (2)
Gases emitted pollute the atmosphere (2)
Gases emitted cause acid rain (2)
[Any TWO. Accept other] 2x2 (4)

3.4.3 Coal cleaning prior to combustion (2)
The use of high efficiency coal combustion technologies (2)
Filters/electrostatic precipitators in chimneys (2)
Laws limiting emissions (2)
Heavy fines if law is broken (2)
Use clean energy sources such as water, sun and wind (2)
Revegetation (2)
Public awareness (2)
[Any THREE. Accept other] 3x2 (6)

3.5.1 It refers to assistance or support for economic and/or human development (2)
[Concept] 1x2 (2)

3.5.2 Bilateral is aid given by one government to another with conditions (2)
[Concept]
Humanitarian is aid given to individuals in times of natural disasters or civil conflict (2)
[Concept] 2x2 (4)

3.5.3 Save the Children/Oxfam/UNICEF (2)
[Any ONE. Accept other] 1x2 (2)

3.5.4 Shelter (2)
Health care (2)
Clean water (2)
Clothing (2)
Blankets (2)
[Any ONE. Accept other] 1x2 (2)

3.5.5 <u>Yes</u>
Humanitarian aid must be provided (2)
Ensures food security (2)
Saves lives in times of disaster (2)
Helps rebuild livelihoods (2)
Helps to rebuild homes after a disaster (2)
Provides shelter after a disaster (2)
Can provide health care (2)
Improve standards of living (2)
Help increase food production and so improve the quality and quantity of food available (2)
<u>No</u>
Humanitarian aid must not be provided (2)
Increase the dependency of LEDCs on donor countries (2)
Aid may not reach the people who need it most (2)
Corruption may lead to local politicians using aid for their own means
Corruption may lead to local politicians using aid for political gain (2)
The receiving country may end up owing a donor country or organisation a favour (2)
Pre-existing infrastructure is repaired (2)
Disaster prevention and preparedness is improved (2)
Early warning systems developed (2)
Contingency stocks and planning provided (2)
[Must debate **for** or **against**. Reasons must support answer. Any SIX. Accept other] 6x2 (12)

3.6.1 No (2) 1x2 (2)
3.6.2 A condition is attached to his assistance (2) 1x2 (2)
3.6.3 MEDC - Man with cigar/fat man/well-dressed man (2)
LEDC – Thin man/poorly dressed man/man with dog (2) 2x2 (4)
3.6.4 Tariffs (2)
Import licenses (2)
Export licenses (2)
Import quotas (2)
Subsidies (2)
Local content requirements (2)
Embargoes (2)
Trade restrictions (2)
[Any TWO. Accept other] 2x2 (4)
3.6.5 Trade of goods without taxes (including tariffs) or other trade barriers (e.g. quotas on imports or subsidies for producers) (2)
Trade in services without taxes or other trade barriers (2)
The absence of trade-distorting policies (such as taxes, subsidies, regulations, or laws) that give some firms an advantage over others (2)
Free access to markets (2)
Free access to market information (2)
Inability of firms to distort markets through government-imposed monopoly power (2)
[Any THREE. Accept other] 3x2 (6)
[100]

QUESTION 4

4.1.1 Rostow development model (2) 1x2 (2)
4.1.2 economic indicators (2) 1x2 (2)
4.1.3 tertiary activities (2) 1x2 (2)
4.1.4 primary activities (2) 1x2 (2)
4.1.5 export led development (2) 1x2 (2)

4.2.1 C (2) 1x2 (2)
4.2.2 B (2) 1x2 (2)
4.2.3 A (2) 1x2 (2)
4.2.4 B (2) 1x2 (2)
4.2.5 B (2) 1x2 (2)

4.3.1 Energy produced by nuclear fusion/from uranium (2) 1x2 (2)
4.3.2 Koeberg (2) 1x2 (2)
4.3.3 Large coal reserves in South Africa (2)
Coal seams close to surface and easily obtained (2)
Relatively cheap to produce electricity (2)
[Any TWO] 2x2 (4)
4.3.4 Due to the accident at Japan's Fukushima nuclear plant (2) 1x2 (2)
4.3.5 <u>Agree</u>
It is environmentally clean - no emissions of greenhouse gases such as CO_2 (2)
No global warming and acid rain (2)
Nuclear energy is cheap and competitive with fossil fuel (2)
It is possible to generate a large amount of electricity in one single plant (2)
Nuclear energy prices are stable (2)
Uranium doesn't take up much space and can be easily stored until needed (2)
Uranium is plentiful - there is enough to last most of a century if we use it wisely (2)
Nuclear energy is safe (2)
The cost to human health and the environment is low (2)
<u>Disagree</u>
The storage and management of dangerous high-level radioactive waste (2)
High-level nuclear waste can last for thousands of years before being safe again (2)
The possibility of explosion of nuclear materials (2)
Potential terrorist threats (2)
The high cost of building nuclear facilities (2)
The possibility of accidents (2)
Long time frame needed for planning and building of a new nuclear power generation plant (2)
[Must debate **for** or **against**. Reasons must support answer. Any SIX. Accept other] 6x2 (12)

4.4.1 Cross-section through soil showing the different layers (2)
[Concept] 1x2 (2)
4.4.2 A layer within the soil profile (2)
[Concept] 1x2 (2)
4.4.3 Food is grown in this horizon (2)
Vegetation which provides oxygen grows here (2) 2x2 (4)
4.4.4 A-horizon (2) 1x2 (2)

4.4.5 Determines mineral composition of soil (2)
Determines the texture of the soil (2)
[Any ONE] 1x2 (2)

4.4.6 Allows for chemical weathering and determines texture of soil (2)
Increases leaching if there is a lot of water (2)
Results in calcification if evaporation rate is high (2)
Heavy thundershowers lead to soil erosion (2)
Temperature determines the humus content of soil (2)
Very hot conditions increase mechanical weathering forming coarsely grained soil (2)
Wind results in soil erosion (2)
Sunshine influences rate of weathering (2)
[Any TWO] 2x2 (4)

4.4.7 All layers are well-developed and clearly visible (2) 1x2 (2)

4.5.1 Refers to social and economic interconnection between countries (2)
[Concept] 1x2 (2)

4.5.2 Creates a negative impression (2)
Globalisation is not good (2)
Globalisation monopolised by the USA (2)
[Any ONE. Judge interpretation by candidate] 1x2 (2)

4.5.3 The United States of America (2) 1x2 (2)

4.5.4 LDCs are exposed to external economic forces over which they have little control (2)
Reduced national independence making macro-economic management by domestic governments difficult (2)
A state's ability to raise corporation taxation is declining (2)
Trans-national companies may relocate if taxed too highly and use transfer price to avoid paying domestic taxes (2)
Globalisation may be strengthening the position of the developed economies that are better able to take advantage of free trade (2)
Exploitation of resources in LEDCs (2)
Labour exploitation in LEDCs e.g. long hours/low wages/child labour, etc. (2)
Pollution/Environmental problems in LEDCs (2)
Low profits for LEDCs as finished goods are sent back to country where multinational company is situated for export (2)
[Any THREE. Accept other] 3x2 (6)

4.5.5 Developing economies may gain through foreign direct investment (2)
Developing economies may gain through the benefits of trade (2)
Developing economies may gain through technology transfer (2)
Globalisation can increase the ratio of trade to GDP for many LEDCs (2)
Increase in capital flows between counties (2)
An increase in trade in goods and services (2)
Job creation on LEDCs (2)
Improved standards of living in LEDCs (2)
[Any SIX. Accept other] 6x2 (12)

4.6.1	Males and females are not treated equally/treated differently (2) [Concept]	1x2 (2)
4.6.2	Females (2)	1x2 (2)
4.6.3	Males get a higher wage (2) Employed on a part time basis or seasonally only (2) Males promoted above females (2) Denied access to proper education (2) No rights to vote No rights to own land (2) Arranged marriages (2) Forced prostitution (2) [Any ONE]	1x2 (2)
4.6.4	Gautemala (2)	1x2 (2)
4.6.5	Women are not empowered (2) Poor education/training of females (2) Low status of women (2) [Any TWO. Accept other]	2x2 (4)
4.6.6	Increasing number of women in management positions (2) Awareness campaigns against violence to women (2) More women in politics (2) More women in fields traditionally associated with men (2) [Any TWO. Accept other]	2x2 (4)
		[100]

GRAND TOTAL: 300