GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

PREPARATORY EXAMINATION

2018

MARKING GUIDELINES

GEOGRAPHY PAPER 1 (10781)

13 pages

GAUTENG DEPARTMENT OF EDUCATION

PREPARATORY EXAMINATION – 2018

GEOGRAPHY
(Paper 1)

MARKING GUIDELINES

QUESTION 1

1.1.1 low (1)
1.1.2 high (1)
1.1.3 subsiding (1)
1.1.4 clockwise (1)
1.1.5 C (1)
1.1.6 higher (1)
1.1.7 berg (1) (7 x 1) (7)

1.2.1 Radial (1)
1.2.2 Rectangular / C (1)
1.2.3 Trellis (1)
1.2.4 Rectangular / C (1)
1.2.5 Dendritic / D (1)
1.2.6 Dendritic / D (1)
1.2.7 Trellis / B (1)
1.2.8 Radial / A (1) (8 x 1) (8)

1.3.1 Clockwise rotation of the air around the low pressure system (visible on satellite image) (1)
Mozambique / Madagascar is visible on the satellite photo (1)
(Any ONE) (1 x 1) (1)

1.3.2 Strong winds (1)
Torrential rainfall and wind (1)
Flooding (1)
Very rough sea (1)
Wind speeds of up to 60km/h (1)
Huge vertical clouds (1)
Heavy showers / thunderstorms (1)
[Any TWO] (2 x 1) (2)

1.3.3 (a) Dissipating (1) (1 x 1) (1)

1.3.3 (b) Less visible vortex (2)
The eye is not visible. (2)
Moving over Mozambique / moved over Madagascar / moving over land (2)
(Any ONE) (1 x 2) (2)

1.3.4 The storm was downgraded to a tropical depression. (2) (1 x 2) (2)

1.3.5 Increase in soil erosion (2)
Removal of vegetation (2)
Loss of life with regards to wildlife (2)
Natural habitats of animals are destroyed (2)
Food chain and food webs are destroyed (2)
Removal of fertile soil (2)
(Any FOUR) (4 x 2) (8)

1.4.1 (a) A - Highest insolation (1)
B - Lowest insolation (1) (2 x 1) (2)

(b) South-facing slope is warmer in northern hemisphere (2)
North-facing slope is cooler in the northern hemisphere (2)
(Any ONE) (1 x 2) (2)

1.4.2 A mountainside zone where frost or freezing temperatures are less likely to occur than they are at either higher or lower elevations because of the development of the inversion layer. / Zone of warm air mid-way of the valley slopes (Concept) (1) (1 x 1) (1)

1.4.3 Katabatic wind (1) (1 x 1) (1)

1.4.4 Slopes cool / air above slopes cool because of terrestrial radiation during night (2)
Cold air on slopes descends to valley floor (2)
Cold air forces warm air on valley floor to rise in the centre of valley (2)
[Any TWO] (2 x 2) (4)

1.4.5 Middle of the slopes are warmer because of the development of the inversion layer (2)
Less money will be spent on the heating of the settlement (2) (2 x 2) (4)

1.5.1 (a) River system is the main stream and all its tributaries (Concept) (1)
(b) Drainage basin is the total area drained by a main stream / river and its tributaries (Concept) (1) (2 x 1) (2)

1.5.2 A - Interfluve (1) (1 x 1) (1)

1.5.3 C (1) (1 x 1) (1)

1.5.4	Drainage basin **C** has more tributaries than drainage basin **B**. (2)	(1 x 2)	(2)
1.5.5	It will increase. (2)	(1 x 2)	(2)
1.5.6	An oxbow lake will form. (2) Water will cut through the neck of the meander. (2) Meander neck will get narrower. (2) (Any TWO)	(2 x 2)	(4)
1.5.7	At **D** there are more tributaries joining the main stream. (2) At **D** a larger volume of water joins. (2) At **E** there are less / few tributaries, joining the main stream. (2) At **E** a smaller volume of water joins. (2) (Any ONE)	(1 x 2)	(2)
1.6.1	Upper course / torrent stage (1)	(1 x 1)	(1)
1.6.2	The less resistant rocks erode faster than the more resistant rocks (2)	(1 x 2)	(2)
1.6.3	It will create faster runoff (2) Which will create more vertical erosion (2) Creating a steep slope (2) [Any TWO]	(2 x 2)	(4)
1.6.4	Headward / Backward erosion (1)	(1 x 1)	(1)
1.6.5	It will attract more ecotourism / adventure tourism / tourists to the area bringing in more revenue (2) Development of holiday resorts (2) It will improve the infrastructure of the area (can give examples) (2) Create more employment opportunities (2) It will encourage more businesses to open up in the area (can give examples) (2) There will be more investments in the area (2) It will stimulate the growth of the local arts and crafts market in the areas (2) There will be a larger local market which will encourage more business development (2) Development of hydro-electrical power station (2) Due to the hydro-electrical power station the local community will become less reliant on the national grid (2) [ANY FOUR]	(4 x 2)	(8)

[75]

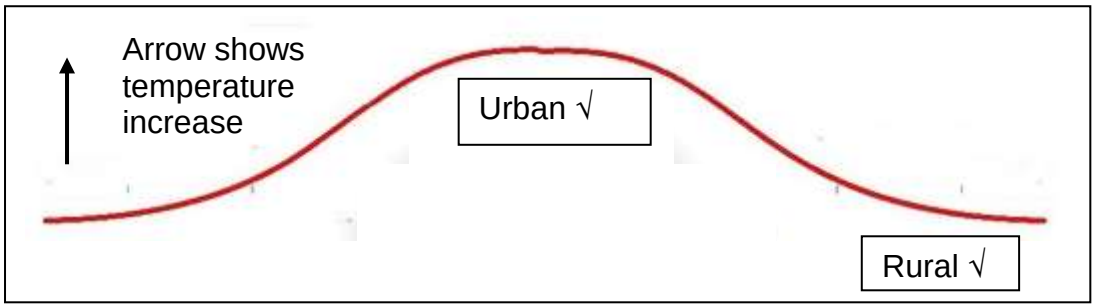
QUESTION 2

2.1.1 A / northern (1)
2.1.2 C / easterly (1)
2.1.3 B / May (1)
2.1.4 B / south east (1)
2.1.5 A / 1002 (1)
2.1.6 C / Cumulonimbus (1)
2.1.7 A / 0° (1)
2.1.8 C / occlusion (1) (8 x 1) (8)

2.2.1 Under cut slope (1)
2.2.2 Delta (1)
2.2.3 Middle / valley (1)
2.2.4 Meander neck (1)
2.2.5 Source (1)
2.2.6 Oxbowlake (1)
2.2.7 Slip-off slope (1) (7 x 1) (7)

2.3.1 The climate in urban areas that differs from that in neighbouring rural areas, as a result of urban development. (Concept) (1) (1 x 1) (1)

2.3.2



(Candidates must correctly label the urban and rural area on the graph.)
(ONE mark for each label) (2 x 1) (2)

2.3.3 (a) Urban 0.5 – 3°C more than rural temperature (1)
Rural 0.5 – 3°C less than urban temperature (1)
Urban is higher than rural temperature (1)
Rural is lower than urban temperature (1)
(Any ONE) (1 x 1) (1)

(b) Variation in precipitation is 5 - 15 % more in urban than rural areas (2)
Urban receives 5 – 15% more (2)
Rural receives 5 – 15% less (2)
(Any ONE) (1 x 2) (2)

2.3.4 The urban area is warmer than the rural area and therefore has a lower pressure. (2)
Stronger convection currents result in more condensation. (2)
Air moves from the rural area (HP) to the urban area (LP) bringing in humidity. (2)
Condenses around the large amount of condensation nuclei (dust particles) resulting in more rainfall (2)
(Any TWO) (2 x 2) (4)

2.3.5 The urban area has a greater amount of pollution which limits the amount of insolation. (2)
The urban area has a larger amount of cloud cover which limits the amount of insolation. (2) (2 x 2) (4)

2.4.1 (a) Winter (1) (1 x 1) (1)

(b) Presence of a well-developed Kalahari anti-cyclone over South Africa (2)
Cold front is visible over South Africa (2)
Low temperatures over the Western Cape (2)
Low dew point temperatures (2)
(Any ONE reason) (1 x 2) (2)

2.4.2 Coastal Low (1 x 1) (1)

2.4.3 (a) Off-shore (2) (1 x 2) (2)

(b) Berg wind (2) (1 x 2) (2)

2.4.4 Air is moving from land to sea resulting in a dry wind (2)
Dry wind creates less humidity and less cloud cover in Durban (2)
The air moves down the escarpment and heats up adiabatically (2)
The adiabatic heating causes warmer temperatures in Durban (2) (4 x 2) (8)

2.5.1 The area over which rain falls and feeds the drainage basin (Concept) (1)
(1 x 1) (1)

2.5.2 “to protect and restore the Mystic River, its tributaries and watershed lands for the benefit of present and future generations” (1)
“to celebrate the value, importance and great beauty of these natural resources.” (1)
(Any ONE) (1 x 1) (1)

2.5.3 Areas of hazardous waste (1) (1 x 1) (1)

2.5.4 Urban development (2) – Poor water quality from storm water runoff (2) and sewage contamination along the river (2)
Industrial development (2) – Contaminated sediments from industrial runoff (2)
Farming (2) – The farming activities that use fertilizers / insecticides / pesticides can contaminate the river (2) (4)
(Any ONE with their negative effect) (2 + 2)

2.5.5 Collect and use water quality data and the latest research to deal with negative effects (2)
Removal of the invasive plants (2)
Conduct impact studies on the influence that each site has on the catchment area and water quality of the river (2)
Connect communities by doing impact studies in schools (2)
Recruit volunteers to help in the control of the sustainability of the water quality (2)
Participation of the community in river and park clean-ups (2)
Keeping pollution out of the water (2)
Restoring important habitat by planting indigenous plants (2)
Reduce effluent in the area (2)
Through legislation make laws that limit the pollution in the area (2)
Implement fines that will discourage the polluting of the area (2)
Create awareness campaigns which highlight the importance of the Mystic River catchment area (2)
(Any FOUR) (4 x 2) (8)

2.6.1 Cross profile – Drawing of a side profile of a river, from one river bank to the other (Concept) (1)
Longitudinal profile – Side view of a river from source to mouth (1)
(Concept) (2 x 1) (2)

2.6.2 1 – Upper / Youth / Torrent stage
2 – Middle / Mature / Valley stage
3 – Lower / Old age / Plain stage (3 x 1) (3)

2.6.3 (a) 1 – B
3 – A (2 x 1) (2)

(b) Stage 1 has a lot of vertical erosion therefore it has a narrow and steep sided valley (B) (2)
Stage 3 has more deposition and lateral erosion therefore has a wide valley (A) (2) (2 x 2) (4)

2.6.4 (a) It has temporary base levels. (2)
The (concave) profile is not smooth. (2)
(Any ONE) (1 x 2) (2)
(b) When there is a balance between the erosion and deposition in a river (2) (1 x 2) (2)
[75]

QUESTION 3

3.1.1 E / linear shape (1)
3.1.2 B / bridge town (1)
3.1.3 G / wet-point settlement (1)
3.1.4 C / dry-point settlement (1)
3.1.5 D / T-junction village (1)
3.1.6 H / crossroad village (1)
3.1.7 F / defence town (1) (7 x 1) (7)

3.2.1 Gross domestic product (1)
3.2.2 Trade (1)
3.2.3 22% (1)
3.2.4 9% (1)
3.2.5 Agricultural (1)
3.2.6 Tertiary (1)
3.2.7 Finance (1)
3.2.8 9% (8 x 1) (8)

3.3.1 land-use zones (1) (1 x 1) (1)

3.3.2 Residential (1)
Industrial (1)
Commercial / CBD (1) (3 x 1) (3)

3.3.3 Outside the CBD (2)
Away from the noise of the CBD (2)
Away from the industrial areas (2)
Less pollution (2)
Less traffic congestion (2)
Less crime (2)
(Any ONE) (1 x 2) (2)

3.3.4 Close to the CBD / Industrial areas, to be close to work (2)
Save on transport (2)
Close to national roads for easy access to transport services (2)
Cheaper accommodation (2)
(Any TWO) (2 x 2) (4)

3.3.5 Residential zones and industrial zones extend outwards in sectors (2)
Sectors form along transport routes (2)
Low income residential areas are close to industrial areas (2)
High income residential area away from CBD / industries (2)
(Any TWO) (2 x 2) (4)

3.4.1 The function of the land in an urban area (Concept) (1) (1 x 1) (1)

3.4.2 Residential land-use zone (1) (1 x 1) (1)

3.4.3 Family homes have been turned into businesses. (2) (1 x 2) (2)

3.4.4 Pollution (1)
Congestion (1)
Crime (1)
High rates and taxes (1)
(Any TWO) (2 x 1) (2)

3.4.5 They are close to shopping centres for their own convenience. (2)
The value of their homes are increased as it is close to a shopping centre. (2)
They are situated close to job opportunities. (2)
Better aesthetic appeal (2)
(Any ONE) (1 x 2) (2)

3.4.6 Overcrowding and congestion in the city centre forces people to move to security estates. (2)
Pollution, noise and decay of the city centre forces people out of the CBD. (2)
CBD appears old and undesirable whereas the security estates are seen as young, vibrant and dynamic. (2)
Due to high crime rates people prefer security estates. (2)
Green areas in security estates look more attractive. (2)
(Any FOUR) (4 x 2) (8)

3.5.1 finance, real estate and business services (1) (1 x 1) (1)

3.5.2 agriculture, forestry and fishing (1) (1 x 1) (1)

3.5.3 3.8 % (2) (1 x 2) (2)

3.5.4 Due to the rapid development of the secondary and tertiary economic sectors (2) (1 x 2) (2)

3.5.5 **LINK INDUSTRIES**
Link industries lost their market. (2)
Link industries had to close down. (2)

COMMUNITY
Increase in unemployment (2)
Poverty increased (2)
Decrease in the quality of life (2) (Can give examples)
Crime increased (2)
Informal settlements increased (2)
Decay of the industrial buildings can lead to social problems (Can explain examples) (2)
(Any FOUR – Must include link industries and community) (4 x 2) (8)

3.6.1 Precious stones (1) (1 x 1) (1)

3.6.2 Mineral fuels (1) (1 x 1) (1)

3.6.3 More investments in the country (2)
Foreign currency entering the country (2)
Stronger value of the rand (2)
More job opportunities available in the country (2)
Larger domestic market available (2)
(Any TWO) (2 x 2) (4)

3.6.4 More money available to build schools and health services (2)
More money available for social grants (2)
More job opportunities therefore less poverty (2)
Better equipped clinics and state hospitals (2)
More houses can be built (2)
More teachers can be appointed (2)
More doctors can be appointed in state hospitals (2)
(Any THREE – Can give examples) (3 x 2) (6)

3.6.5 Exporting more processed goods (2)
Improving skills development in the country to increase production (2)
Improving the quality of South African goods (2)
Improving the marketing of South African goods (2)
(Any TWO) (2 x 2) (4)

[75]

4.1.1 conurbation (1)
4.1.2 megalopolis (1)
4.1.3 central place (1)
4.1.4 sphere of influence (1)
4.1.5 range of goods (1)
4.1.6 threshold population (1)
4.1.7 low order services (1) (7 x 1) (7)

4.2.1 informal (1)
4.2.2 informal (1)
4.2.3 formal (1)
4.2.4 informal (1)
4.2.5 formal (1)
4.2.6 informal (1)
4.2.7 formal (1)
4.2.8 formal (1) (8 x 1) (8)

4.3.1 Houses are not built with proper building material. (1)
No formal infrastructure (1)
No piped water supply (1)
No electricity supply (1)
(Any TWO) (2 x 1) (2)

4.3.2 Zinc (1)
Tyres (1)
Wood (1)
Plastic (1)
(Any TWO) (2 x 1) (2)

4.3.3 Can cause the spread of diseases (2)
Not clean and hygienic (Can give examples) (2)
Not safe as it has a fire risk (2)
It damages the natural environment. (2)
(Any TWO) (2 x 2) (4)

4.3.4 Supply them with piped water services (2)
Supply them with electricity services (2)
Improve accessibility, e.g. roads (2)
Implement job creation projects to reduce unemployment (2)
Improve service delivery, e.g. refuse removal services (2)
Create more medical facilities (2)
More open spaces (2)
Build RDP housing (2)
Reduce density of housing / buildings (2)
(Any FOUR) (4 x 2) (8)

4.4.1 A deserted town with few or no remaining inhabitants (1) (1 x 1) (1)

4.4.2 Decrease in tourism (1) (1 x 1) (1)

4.4.3 There will be an increase in rural-urban migration (2) (1 x 2) (2)

4.4.4 No access to buy food and groceries (2)
Have to travel far distances to get their low order goods (2)
Job losses (2)
Crime increase (2)
Increasing poverty (2)
(Any TWO – can give examples) (2 x 2) (4)

4.4.5 Provide subsidies for the business owners for rent / electricity / water accounts. (2)
Create initiatives to attract tourists to this area. (Can give examples) (2)
Building of hotel facilities in the area (2)
Turn unused mines into tourist attractions. (2)
Use the arts and crafts of the local people to create more employment opportunities. (2)
(Any THREE) (3 x 2) (6)

4.5.1 To improve growth, employment and redistribution in the outlying areas
(Concept) (1) (1 x 1) (1)

4.5.2 Limpopo (1)
Mpumalanga (1) (2 x 1) (2)

4.5.3 Create better access between the port of Maputo and mining activities around Phalaborwa (2) (1 x 1) (1)

4.5.4 Improvement of infrastructure, e.g. roads which will attract more tourists (2)
The location of the Kruger National Park close to Phalaborwa will encourage eco-tourism and game farming (2)
Promoting of local arts and crafts will promote tourism (2)
(Any ONE) (1 x 2) (2)

4.5.5 **POSITIVE:**
More conservation will take place, e.g. national parks (2)
More money will be made available for conserving the natural environment (2)
Importance of conserving the natural environment by the locals will be emphasised (2)
Ecosystems will be protected (2)
Biodiversity will be protected (2)

NEGATIVE:
Removal of natural vegetation to build infrastructure (2)
Damage to natural environment by tourists (2)
Development of illegal game farms (canned hunting) (2)
(Any FOUR / Must include positive and negative impacts) (Can give examples)
(4 x 2) (8)

4.6.1 Most = tertiary (1)
Least = primary (1) (2 x 1) (2)

4.6.2 More people employed in the tertiary sector or quaternary sector (2) indicates a higher level of development, (2) OR
Fewer people employed in the primary sector (2) indicates a higher level of development (2) (2 x 2) (4)

4.6.3 An improvement in technology will result in more machines doing the job with less human labour required. (2) (1 x 2) (2)

4.6.4 Products could be produced at a much faster rate (2)
More products to export (2)
The quality of the products will improve as there is less human error (2)
(Any TWO) (2 x 2) (4)

4.6.5 More products need to be processed for more exports therefore more workers need to be employed (2)
More infrastructure built therefore more employment (2)
Through taxes more money is available for training of locals therefore better chances of employment (2)
(Any TWO) (2 x 2) (4)

[75]

TOTAL: 225