



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2013

GEOGRAPHY: PAPER I

MARKING GUIDELINES

Time: 3 hours

300 marks

These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.

The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.

SECTION A GEOGRAPHIC ISSUES

QUESTION 1 GEOGRAPHICAL CASE STUDY: EKURHULENI/JOHANNESBURG GAUTENG

1.1.1 North West, Free State, Mpumalanga, Limpopo (4)

1.1.2 (a) 14 min
(b) 22 min (1 × 2 = 2)

1.1.3 It would take 14 min using the Gautrain and 44 min by road. The extra 30 min is due to distance; intersections; traffic congestion; speed limitations; flow restrictions such as traffic lights; **accidents; weather.** (4)

1.1.4 Tourists are able to plan their journey, decide which mode of transport to use, know what the options are and the relative benefits of driving or using the Gautrain. (2)

1.2.1 An **Urban heat island** is the variation in temperature over the CBD or urban area from day to night. (Heat dome) An area in a city having higher air temperatures than the surrounding rural areas. (2)

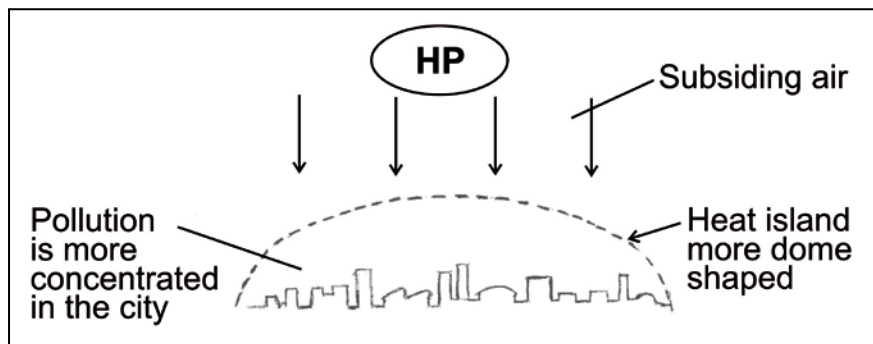
1.2.2

- City temperatures are higher due to artificial surfaces, urban activities such as heat from vehicles, industry, lighting, **air conditioners**
- Increased cloud cover over cities trapping in heat
- Dominant HP systems/Kalahari HP in winter
- Inversions/cities located in a valley
- Increased pollution, increased carbon dioxide trapping in heat
- Less heat used for evaporation as there are generally less water surfaces in cities
- Tall buildings absorb heat in the day and radiate it, making the city warmer
- **Humidity**
- **Albedo-effect**
- **No wind**

(Any FOUR)

(4 × 2 = 8)

1.2.3

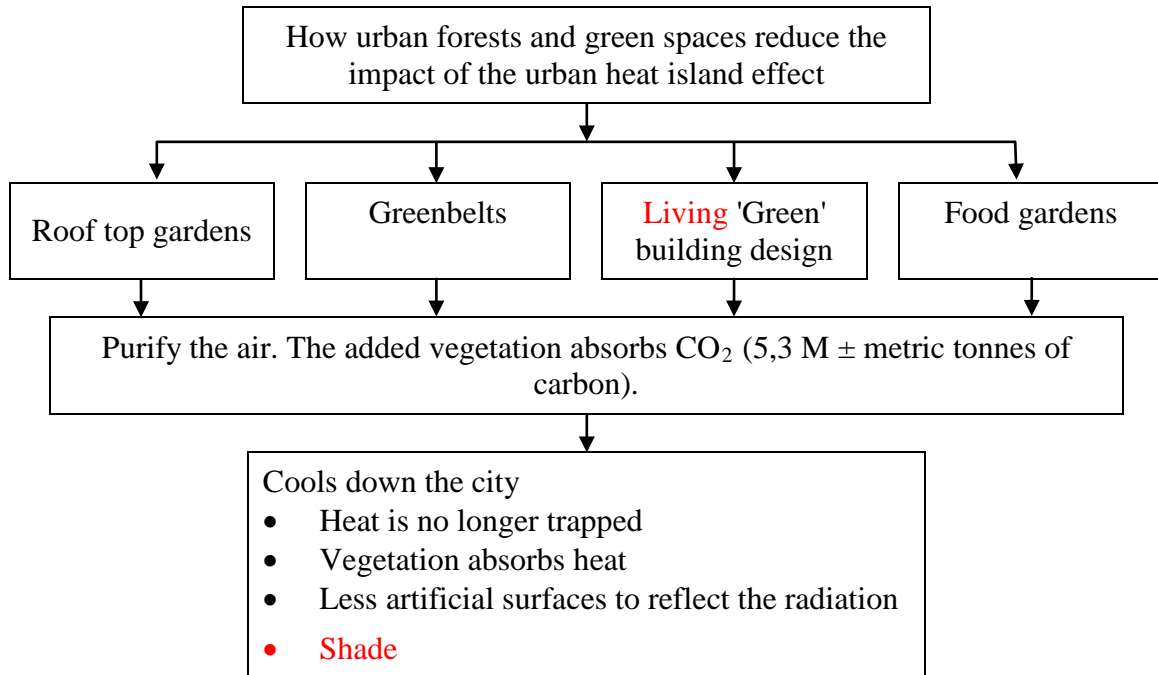


- 2 marks for the shape of the dome (**circular/ convex/ compact**)
- (2 × 2 = 4) for the annotations

(6)

1.2.4 Flights may be delayed or transferred to other airports due to poor visibility/Localised convective storms can occur which will affect flights, **more turbulence** (2 × 2 = 4)

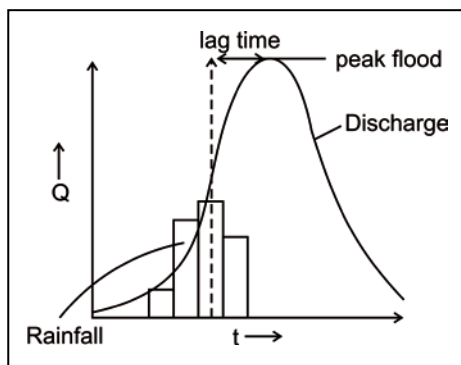
1.2.5



Or award 2 marks per aspect if well explained. (4 × 2 = 8)

- 1.3.1 (a) True (1)
 (b) False: Impermeable surfaces in urban areas result in **lower** infiltration. (3)
 (c) False: The water table will be **higher** in Figure 2A than Figure 2B. (3)
 (d) True (1)

1.3.2



- 2 marks graph, 1 × 4 = 4 for the labels
- **steep falling limb/ steep rising limb** (6)

- 1.3.3
- Planting more vegetation
 - Better planned storm water drains
 - Prevent homes from being built below the 20 year flood line
 - Using paving which allows for more infiltration
 - Fewer sealed surfaces/more natural surfaces
 - Building weirs and artificial levees
 - Canalising rivers (**diversionary canals**) (6)

- 1.4.1 (a) **Industrial park** is a gated, secure zone where light industry takes place such as JIT manufacturing. (2)
- (b) **Mixed-use** is where a number of different land uses are found in the same area, such as residential, commercial and entertainment (live-work-play principle). (2)
- (c) **Airport Edge City** is a concentration of business, shopping, and entertainment around an airport outside a traditional CBD in what had previously been a residential or rural area. **Periphery/ outskirts/ urban-rural fringe.** (2)
- 1.4.2 The impact of the Ekurhuleni Aerotropolis on:
- Urban settlements
- Land use changes
 - Invasion and succession
 - Change of land use/redevelopment
 - ICT corridor will attract IT related industries
 - Mixed land use impact on migration patterns
 - **Traffic**
 - **Pollution**
- Infrastructure development
- Airport express train (Gautrain) connects the Aerotropolis to the CBD and Sandton OBD. Commuters are also using this facility (Rhodesfield Station to Sandton Station).
 - Airport expressway (aerolane) developed to allow easy access to the Aerotropolis.
 - Bandwidth, power supply, phone lines, sewerage and water supply will have to be developed. This will create jobs and benefit the economy.
 - Extended Public Works Program EPWP will be positively impacted on.
 - **Hospital**
 - **Expocentre**
- The economy
- The Albertina Sisulu Corridor (SDI) will boost the economy by creating jobs, attracting investment.
 - Development corridors will attract business to the area.
 - More than a third of all SA's machinery is produced in Ekurhuleni (Fact File) and the Aerotropolis will aid export of these goods.
 - Free trade zones will attract industries that are exchange sensitive.
 - Hotels and conference centers located in the airport city will promote tourism.
 - All the above will generate economic growth and help with the NDP objectives.
 - **Property prices change – decay and decline of housing – invasion of businesses.** (20)
- 1.5.1 **Infrastructure** is the name given to road, rail and air links, sewerage and phone systems and other basic utilities, which provide a network that benefits business and the community. (2)
- 1.5.2 R4,05 Billion
(R4,13 Billion – 50% – accept as an answer) (2)
- 1.5.3 Tertiary sector; **secondary; quaternary** (2)

1.5.4 Sewerage, broadband, power supply and phone systems, **security, communications.** (1 × 2 = 2)

1.5.5 (a) To offset the cost of road construction by charging motorists for using the road. **Raise money, reduce traffic congestion and increase safety.** (2)

(b) Advantage: Only the users pay for the road, local cost not a national cost.
Reduce traffic congestion.

Disadvantage: Alternative routes will be congested, civil protests, added cost for commuters. (2 × 2 = 4)

100 marks

SECTION B NATURAL ENVIRONMENTS

Answer **EITHER** Question 2 **OR** Question 3.

QUESTION 2 GLOBAL CIRCULATION, SYNOPTIC WEATHER MAP, FLUVIAL AND SLOPE GEOMORPHOLOGY**2.1 Global circulation**

2.1.1 The line indicated by A is the ...

B equator

2.1.2 The circulatory feature indicated by the cloud mass at B is a...

D tropical cyclone

2.1.3 The air in system B is circulating in a/an ... direction.

B clockwise

2.1.4 The force known for creating the circulatory feature B is known as ...

A Coriolis

2.1.5 The pressure belt indicated by C is the ...

C subtropical high

2.1.6 Travelling disturbances labelled D are known as ...

D mid-latitude cyclones

(6 × 2 = 12)

2.2 Synoptic weather map analysis

2.2.1 (a) A – South Atlantic High/St Helena High **or anticyclone**
B – South Indian High/Mauritius High

(4)

(b) C – cold front

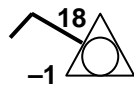
(2)

2.2.2 Steep pressure gradient with another cold front following after the present cold front; this means wind strength increases as the pressure gradient intensifies South westerly winds also blow onshore and create huge wave swells.

Rapid uplift of air along the cold front
Moving into an intense LP of 998 hPa
Ridging HP from west.

(4)

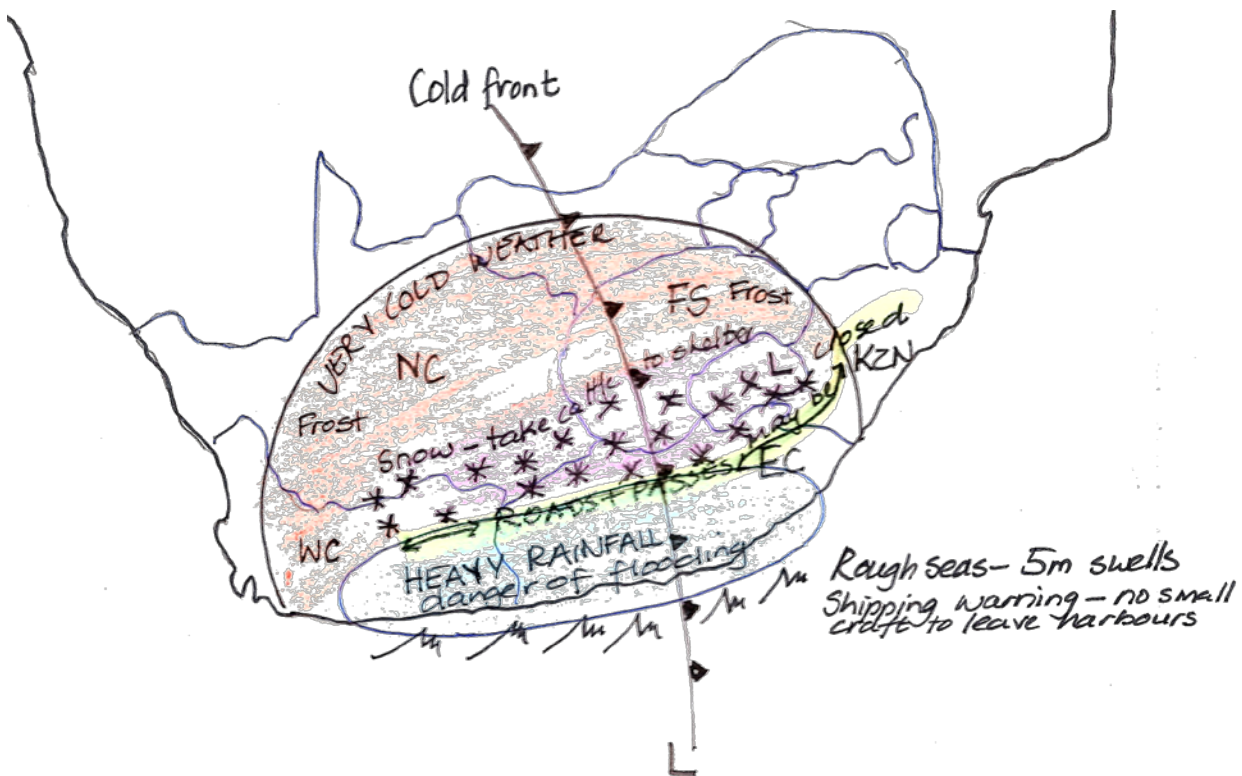
2.2.3 The weather station at Kroonstad (K) records the following information:



State if the following statements about Kroonstad are TRUE or FALSE. If FALSE write out the correct sentence.

- (a) False The **dewpoint** temperature is $-1\text{ }^{\circ}\text{C}$ or the air temperature is $18\text{ }^{\circ}\text{C}$
- (b) False The cloud over is **clear** or 0/0 (**automatic weather station; cloud cover undetermined**)
- (c) False The wind speed is 10 **knots**. A knot is a nautical wind speed
- (d) True The wind direction is north westerly. The wind is named from the direction which it blows.
- (e) True The symbol used is that of an automated weather station. (8)

2.2.4 A simple weather advisory in the form of an annotated sketch map



Mark allocation

Heavy **rainfall** along the coast

Rough seas – swells and shipping warning because of the strong winds

Snow over high-lying areas and Lesotho

Roads/passes may be **closed**

Very cold conditions and possibly frost – WC, NC, FS and KZN – areas surrounding the snow areas – **animals should be under shelter** in all these areas – especially the young animals

Cold front over the interior – about half-way across the country (labelled)

(12)

2.3 **Fluvial and slope geomorphology**

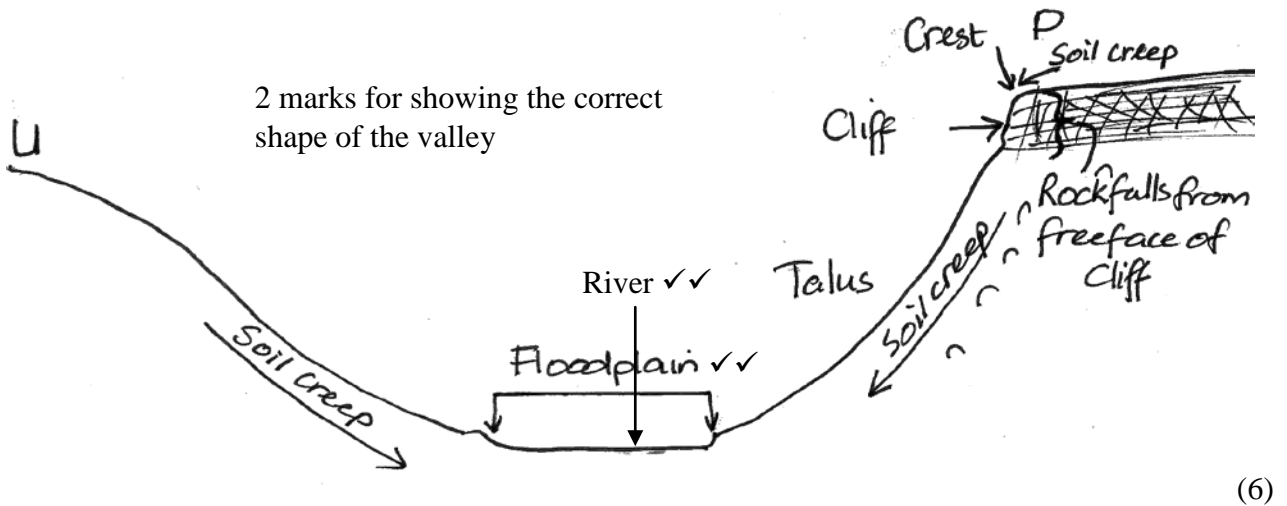
2.3.1 **Select** the correct underlined term(s) in each of the following sentences. Write down only the question number (a) to (e) and the correct term(s) in your Answer Booklet.

- (a) The point where two rivers meet is called a **confluence point**.
- (b) A river that only flows after a rainstorm is **episodic**.
- (c) The water table of such as river (Question 2.3.1 (b)) is found **close to the surface**.
- (d) The climate of the area shown in Photograph 3 is **arid**.
- (e) Photograph 2 is an **oblique** photograph. (5 × 2 = 10)

- 2.3.2 (a) P Crest
 Q Cliff/vertical slope/krans/scarp/free face
 R Talus/debris slope/scree (6)

- (b) The debris cone has formed at T because of sheet wash erosion after a rain storm. The water washes down the debris and this accumulates at the bottom. There is also evidence of gully erosion and this has the same effect. The boulders collect at the bottom of the slope.
Lack of vegetation to hold the soil
Gravity (4)

2.3.3 (a) A cross section across the river valley from U to P.



- (b) See 2.3.3 (a) soil creep and rockfalls (4)
- (c) Asymmetrical shape
 Uplift; rejuvenation; tilted strata
At P there is a horizontal layer of hard rock, removed. (4)

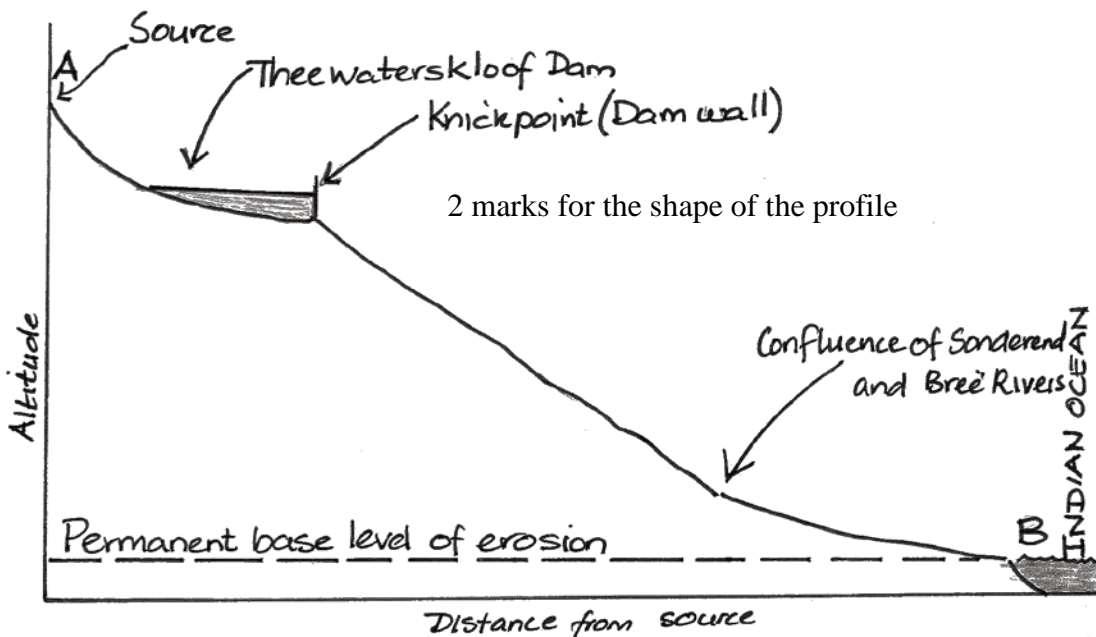
2.3.4 (a) Hydrograph Z best reflects the discharge in the river valley shown in Photograph 3 after a rainstorm. (2)

- (b) Lack of base flow; this is an episodic river and will only flow after a heavy downpour/storm. (2)

2.4 The Breë River catchment area

- 2.4.1 The catchment area of a river system – an area where the river draws its water from/the area over which rain falls that is caught by a drainage basin. (2)
Boundary of a drainage basin

- 2.4.2 A well-labelled longitudinal profile of the Breë River from A to B. (6)
temporary base level



- 2.4.3 (a) Theewaterskloof Dam holds is approximately 53 – 54% of the total storage capacity. (2)
- (b) High in the Sonderend River catchment area – mountainous region of the Franschhoek Mountains – large amount of runoff, especially in winter (Five rivers flowing into the dam from the mountains). (2)
Upper course – narrow wall
Deep – less evaporation.
- (c) In August 71,6% and in December 91,3% – indicates seasonal rainfall patterns. August percentage reflects the long dry summer months when water is drawn from the dam – levels drop. Dams fill up over the winter months; winter rains could have been late in 2012 and the dam had not reached its capacity by August. The dams are full by November – December from groundwater recharge as well as runoff. **Late seasonal rainfall** (2)
- (d) The importance of long-term water catchment management in meeting the water demands of expanding urban areas. (2)
Storage dams area needed in the area.
 With increase in population and growth of industry demand may be more than supply. **Inter-basin transfer schemes** are important, such as the LHWP supplying the Vaal Dam with water for Gauteng; the Steenbras and Theewaterskloof supplying water for Cape Town.

Reducing runoff in major catchment areas by transferring water to **holding dams** is important.

Clean water is also important; water in the Theewaterskloof is from **source areas and is very clean.**

Concept of future planning

Increased demand from industry and population growth

(6)

100 marks

SECTION B

QUESTION 3 TROPICAL CYCLONES, MICROCLIMATES, FLUVIAL GEOMORPHOLOGY, LANDFORMS AND MASS WASTING

3.1 Tropical cyclones

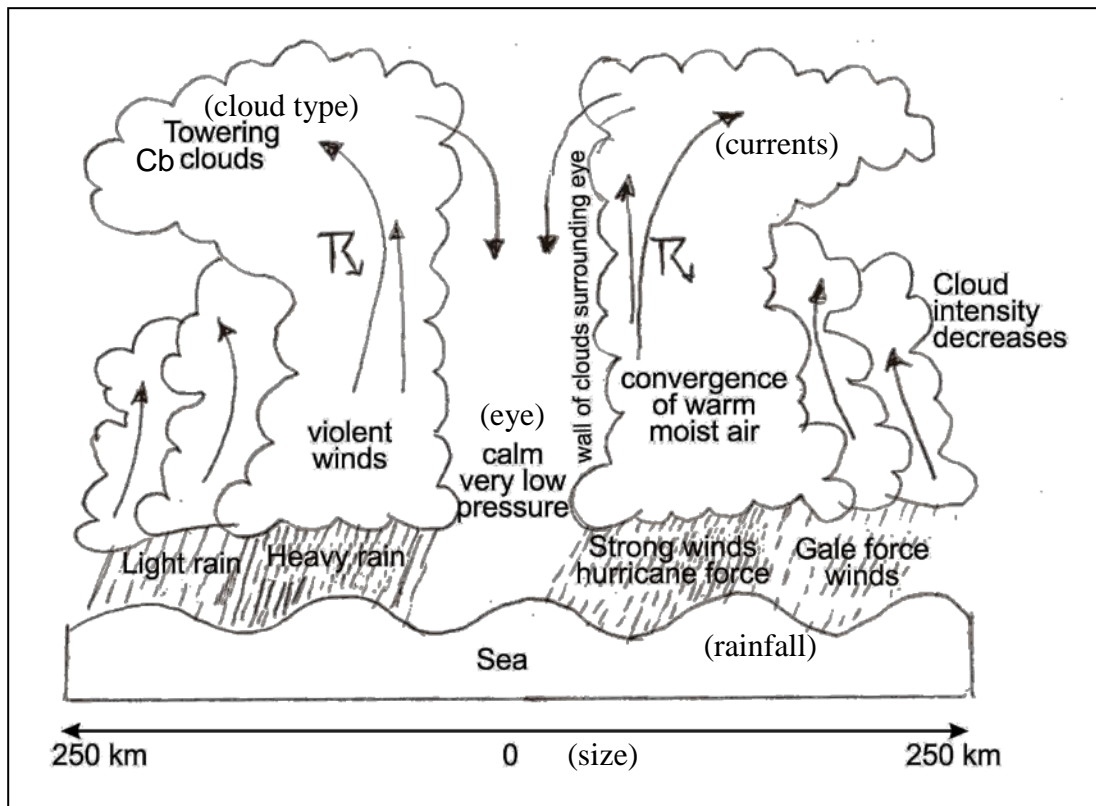
- 3.1.1 (a) True
- (b) False: Tropical cyclones occur in late summer.
- (c) False: Tropical cyclones have a steeper/greater pressure gradient than mid-latitude cyclones. **The pressure gradient is different**
- (d) True (8)

3.1.2

	23 October 2012	25 October 2012	30 October 2012
Stage of development	Tropical storm	Hurricane stage 2	Hurricane stage 1
Wind speed	50 km/h	180 km/h	180 km/h

(6)

3.1.3



(8)

- 3.1.4 Hurricane Sandy was over land after 30 October so it started to dissipate due to friction, loss of energy (latent heat) and loss of water supply. Cooler air may have increased the air pressure and it is further north (temperate latitudes). (2 × 2 = 4)

3.1.5



<p>Hurricane Sandy gained strength in the warm 27° C waters of the N Atlantic ocean and her path allowed for her to 'refuel', only dissipating over land/exacerbated by global warming.</p> <p>Between 5° and 30°</p> <p>(2)</p>	<p>The social effects in a LEDC such as Cuba were greater, 15 000 homes destroyed, victims needs greater as basic needs such as food, water and shelter were destroyed.</p> <p>US loss is less due to advanced warning systems, social media in place.</p> <p>Both countries experiences loss of lives (183 people).</p> <p>Both Cuba and US must be mentioned.</p> <p>(2 × 3 = 6)</p>	<p>US economic cost of \$71 B and 8,3 M without power, industry affected as everything is reliant on power. 265 300 businesses were impacted.</p> <p>Cuba may have had less of an economic effect as their economy is not only driven by industry and tertiary sectors.</p> <p>Both Cuba and US must be mentioned.</p> <p>(2 × 3 = 6)</p>
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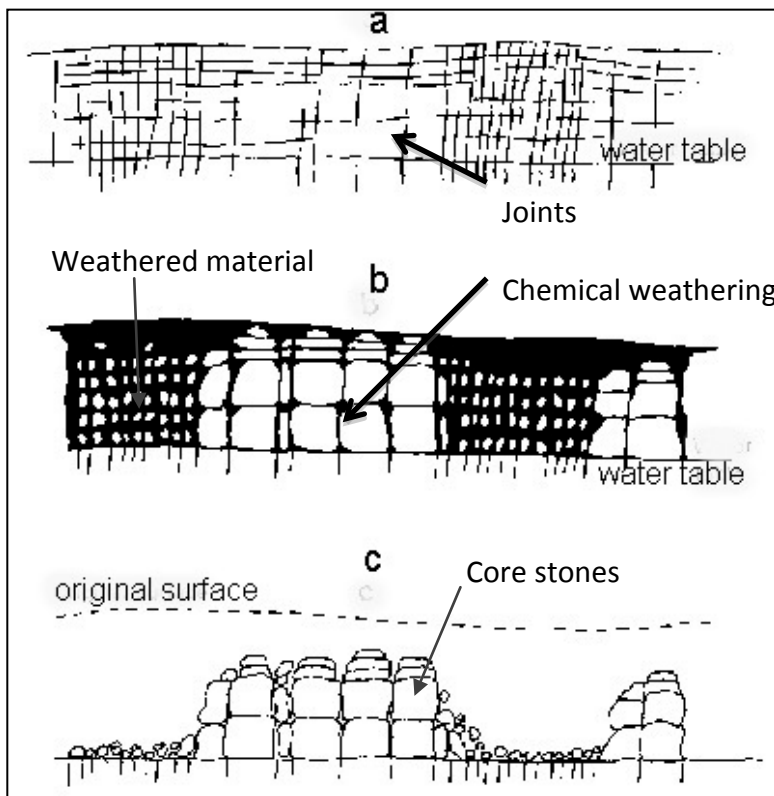
- (2) marks for being in a flow chart/multi-flow map format (16)

3.2.1 Valley inversion/ **radiation fog** (2)

- 3.2.2 (a) Photograph 5 was taken in the **early morning**.
- (b) **Katabatic winds** resulted in this climatic condition.
- (c) The temperatures at the bottom of the valley are **cooler** than the air temperature above.
- (d) This condition is more common in **winter**.
- (e) **Mountain** winds are more likely to occur in photograph 5. (5 × 2 = 10)

- 3.3.1 (a) A **watershed** is the high lying area that separated drainage basins/forms the catchment area. (2)
- (b) **Confluence** is the place where two streams meet/intersections of two rivers. (2)
- (c) **Drainage basin** is the total area chained by a stream network/a river system. (2)

- 3.3.2 The underlying geology is uniformly resistant to erosion/horizontal sedimentary or massive unjointed igneous rock. (2 marks for an example) (2 × 2 = 4)
- 3.3.3 Medium density. (2)
- 3.3.4 Any TWO factors:
- Rock/soil type: Low permeability and clayey soils, higher density, porosity
 - Slope of the land: Greater slope, greater runoff, lower density.
 - Climate: High rainfall, more permanent streams, higher density. Type of rainfall, thunderstorms higher density
 - Vegetation cover: Greater vegetation cover, greater interception, less runoff. (2 × 2 = 4)
- 3.4.1 (a) Photograph 6: Massive igneous rock/dome. (2)
- (b) Photograph 7: Tor (2)
- 3.4.2 Both are formed from igneous rock (Granite), beneath the ground, both can have joints and cracks, both are associated with volcanism. (4)
- 3.4.3 Chemical weathering takes place deep beneath the surface. Joints must not be too close to one another. Vertical and horizontal joints form in the igneous rock as the magma cools and contracts. They are widened when water passes through the joints by chemical weathering. As the joints widen, distinctive rock shapes are formed. The rocks break down, become more rounded core stones. The core stones appear as a loose pile as the weathered material is removed.
 Thomas's theory: Core stones develop on the dome and the granite dome gradually becomes a tor.
 Linton's theory: Takes place during interglacial periods when there are warm, humid conditions. Weathered material is removed and the core stones are left behind. (Diagram below) (6)



[Adapted from: <www.geo-mexico.com>]

- 3.4.4 (a) Rockfall/ **slump/ avalanche/ slide** (2)
- (b) Floods/earth tremors/fire/removing vegetation/construction/gravity/Frost action (list any TWO). **Weakness within rocks** (2 × 2 = 4)
- (c) Build gabions/wire safety nets/place large reinforcing or rock bolts into the rock/gunnite concrete onto the rock surface/build structural over hangs and retaining walls. Retain vegetation/prevent overgrazing. Send rock climbing teams in to remove loose rocks. Run-off channelling/drainage structures to remove excess water. (Any TWO) (2 × 2 = 4)
- (d) Landslides/mudflows/slides and other mass wasting resulted in roads being damaged or washed away (Eastern Cape). Mountain passes closed due to rockfalls (Sir Lowry's Pass). Bridges washed away (St Francis). Poor visibility and wet road surfaces. **Reduced visibility, roads submerged, potholes** (3 × 2 = 6)

100 marks

SECTION C HUMAN ENVIRONMENTS

Answer ONE question from this section, **EITHER** Question 4 **OR** Question 5.

QUESTION 4 PEOPLE AND PLACES, PEOPLE AND THEIR NEEDS

4.1 Terminology

Match the word(s) in Column A with the correct statement in Column B. Write **ONLY** the number and correct letter, for example, 4.1.1 – A.

Column A		
4.1.1	Light industry	H
4.1.2	Balance of trade	D
4.1.2	Break of bulk point	G
4.1.4	Urban sprawl	C
4.1.5	Counter urbanisation	K
4.1.6	Land restitution	J
4.1.7	Densification	E
4.1.8	Quaternary sector	B
4.1.9	Informal sector	F
4.1.10	Gentrification	A

(20)

4.2 Rural issues

4.2.1 (a) De Doorns is a **village/ country town**

(a) The settlement pattern along the Hex River is **linear**.

(b) Farming in the valley is **intensive**.

(c) Farms are located on the **floodplain**.

(d) Rainfall in the area occurs mainly in **winter**.

(10)

4.2.2 (a) Two site factors that make the Hex River Valley an ideal farming area.
 Along the Hex River – where water is available.
 Fertile soils of the flood plain.
 Foot of the Hex River Mountains – flat land.

Sheltered

Any two

(4)

(b) Two factors that make the situation of the valley accessible to farm labour.
 Just off the N1/ **main road**
 32 km north-east of Worcester and 40 km south-west of Touwsrivier.

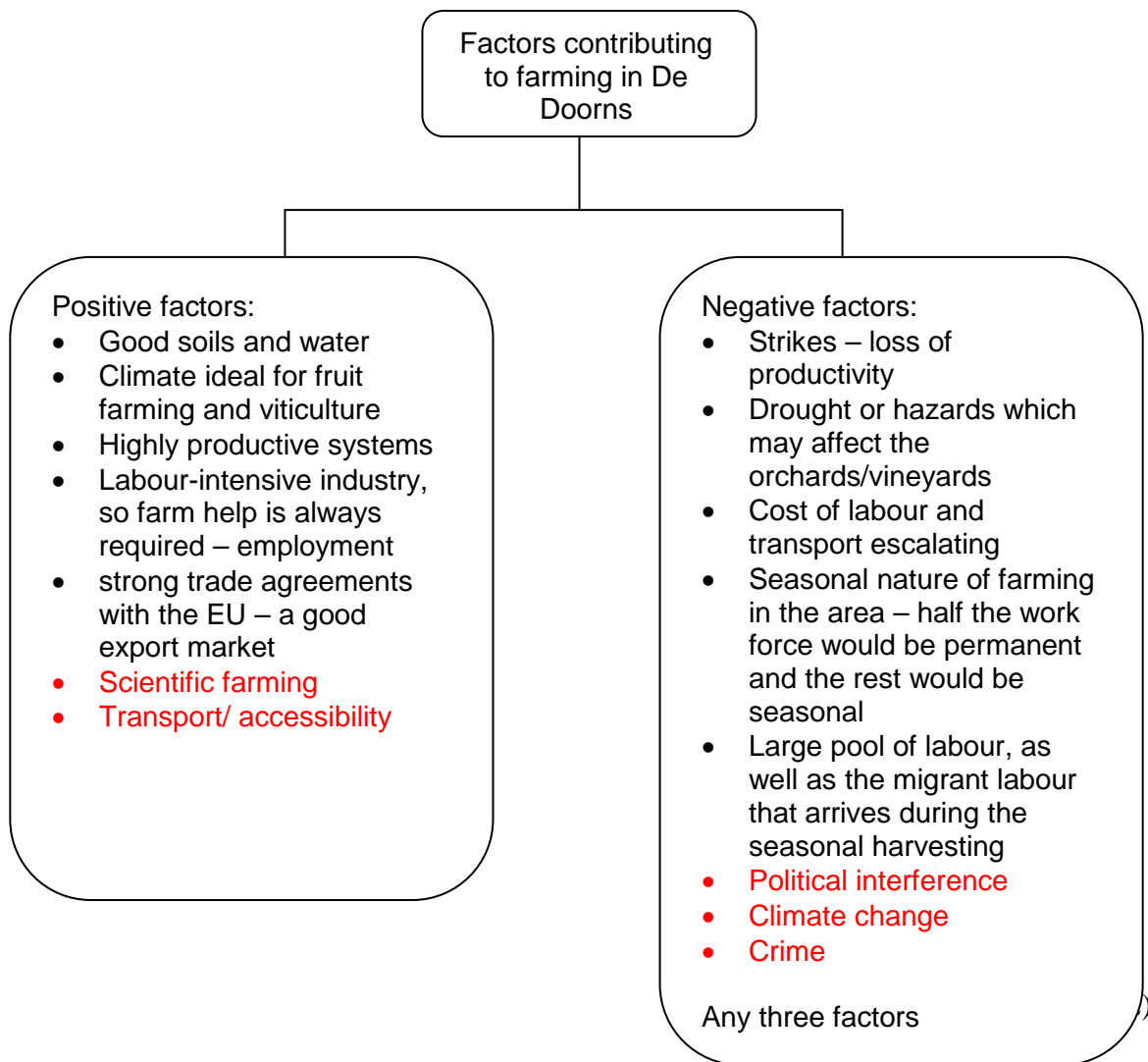
Labour available locally

(4)

4.2.3 (a) Two reasons why informal settlements have grown rapidly in this area.
 Access to transport – can move into the area.
 Lack of adequate housing, so built informal structures.
 Close to a number of towns.
 Any relevant reason.
 Population growth
 Political factors
 Lack of jobs
 Any two (4)

(b) Two problems the people living in these settlements may experience.
 Lack of employment – some of the work is seasonal.
 Lack of income to purchase food.
 Services not provided.
 Any relevant problem.
 Crime
 Flooding
 Social issues
 Any two (4)

(c)



Suggested subheadings must be used

- **The different ways in which urban renewal takes place**

Must look at façadism and urban renewal, gentrification, change in land use function through invasion and succession as well as the importance of urban renewal.

Why urban renewal? – the importance of urban renewal

Older areas have a high land value and therefore it is easier to renovate and renew than demolish. Usually takes place around an anchor facility (e.g. Ellis Park Sports Stadium) – to improve the image of the area.

This adds value to the environment and so as the older buildings are renovated the value increases and the environment becomes more desirable.

Invasion and succession

Occurs in the transition zone where older buildings and homes are bought for retail purposes. A change in land-use function occurs. Eventually large scale redevelopment may take place.

Gentrification

The older homes are well built, but as areas become neglected they are subject to urban decay.

Homes are upgraded, keeping the exterior – often period architecture – so restored to their original glory. These homes are also modernised. Their location is usually close to areas of work and so their value increases as these areas become more popular.

Façadism – the outer shell is kept as of historical importance. The inner area is redeveloped and modernised. Old warehouses become loft apartments; trendy areas for living, for example London Docklands, Durban Point Road. Homes sell for millions of rand.

- **The impact these developments have on the city's economy**

The central areas which have faced urban decline over the past decades are suddenly popular and instead of vacant buildings and no income; rent paying tenants move in; the area starts to generate income.

Areas become economically vibrant with spaces to eat, live and play being developed; trendy.

Transport systems, particularly public transport improve (BRT), as more people use them.

- **Are these developments sustainable in modern cities today?**

Yes/No answers may be given – but must be substantiated with relevant argument.

V and A Waterfront in Cape Town and Melrose Arch in Johannesburg are examples of areas where urban renewal has been successful. These mixed-land use zones are vibrant, trendy and occupancy levels high. These areas have also expanded over the years and are continuing to expand. The Gautrain bus will take commuters to and from Melrose Arch – transport is public and little need to drive cars in peak hour traffic.

Durban Point Development – has met with limited success. Large areas still undeveloped.

Credit given for examples and terminology

4.4 Industrial location – a case study

4.4.1 (a) industrial business estate

an area where industrial and business activities take place in park like surroundings (landscaped). **Green field, secure, single access**

- (b) **sustainable development**
any development that will not impact on the environment negatively and that has a reduced carbon footprint, for example recycling of water; using green building regulations
- (c) **anchor tenant**
The most important tenant in a complex, for example in a mall anchor tenants take up 80% of the retail space. **Attracting people to the centre.**
- (d) **New-urbanism**
An idea that promotes making neighbourhoods function as residential and places of work/contain a range of housing and job types. **Live-work-play** (8)

4.4.2 Two factors that favour this new mixed land use development.
Strategic location – just 15 km from KSIA; close to Durban and the harbour.
Access to transport routes – road, rail, sea and air.
Skilled labour force close by as well as established residential zones.
Fully serviced estate – electricity, water, infrastructure. Any two (4)

4.4.3 Argue that this new development will be sustainable in the long term.
'based on principles of **sustainable development**; higher densities, integration of income levels, amenities such as schools, hospitals and extensive open spaces and a bus rapid transport system (BRT)'.
densification of buildings rather than urban sprawl; wide range of integration of income levels; open spaces – wetlands and open space systems; non-motorised and public transport – BRT – cuts down on motor congestion; built in an environmentally friendly eco-sensitive manner; emphasis on safety and security with looking at mixed-land use functions. (6)

4.4.4 Two environmental factors that will be under pressure from a densely populated area like Conurbia.

- Pressure on water.
- Pressure on essential services such as electricity; sanitation and water.
- Space – open space is important.
- **Air pollution** (4)

100 marks

QUESTION 5 PEOPLE AND PLACES, PEOPLE AND THEIR NEEDS

- 5.1.1 (a) The settlement pattern in photograph 12 is **dispersed**.
- (b) According to the hierarchy of settlements, the settlement in photograph 12 is an **isolated farmstead**.
- (c) The settlement is mainly involved in **primary** activities.
- (d) The main function of this settlement is **extensive** farming.
- (e) The settlement is typical of a **wet point** settlement. (10)

5.1.2 The **site**: land slope – flat, gentle gradient/water supply- located at a possible water source, stream, sparse vegetation is evident in the photograph/good grazing land for animals/shelter – away from hazards such as flooding/evidence of a road to aid transport. (2 × 2 = 4)

5.1.3 **Disadvantages:**

- Lack of social contact
- Safety, farm attacks
- Farmers cannot rely on the community for help.
- Capital intensive and equipment is difficult to share.
- **Lack of services and communication** (2 × 3 = 6)

5.2.1 Land restitution: Restoring land/compensation to its rightful owners where a valid claim has been made. Land lost during colonisation and apartheid/return of ancestral land. **Claim for land, prove ownership (explain the process)** (2 × 2 = 4)

5.2.2 The Group Areas Act of 1950 separated people by race. This resulted in residential areas being separated by *buffer zones* such as roads, green belts and industrial area and not merely by income as in other parts of the world. (4)

5.2.3 Any TWO of the following must be evaluated:

Inner city renewal

- Precinct development involving NGOs and government funding.
- Gentrification projects/Chelseafication, façadism/building restoration, mixed land use development, improved public transport such as MyCiti/ReaVaya.
- 'Greening' the city, sustainable inner city projects.
- Introducing cultural events/concerts, sporting events to generate income in the inner city.
- Crime prevention programs/CCTV cameras.
- Promote tourism in the inner city.

Agenda 21

- Started in 1992, MDGs are now replacing many Agenda 21 initiatives.
- Municipalities create awareness and concern for future generations.
- Awareness of the environment/Sustainable inner city projects such as 'greening' the city/reducing air emissions.
- Empowering, participation and accountability of communities.

- Ensuring that the basic needs of communities are met/providing infrastructure for developing brown-field sites in the city centre.

National Development Strategies

- Extended Public Works Program (EPWP).
- National Development Plan – infrastructure development, service improvement projects in the inner city.

Any other acceptable urban redevelopment strategy well evaluated.

Give credit for the use of examples for each strategy discussed. (20)

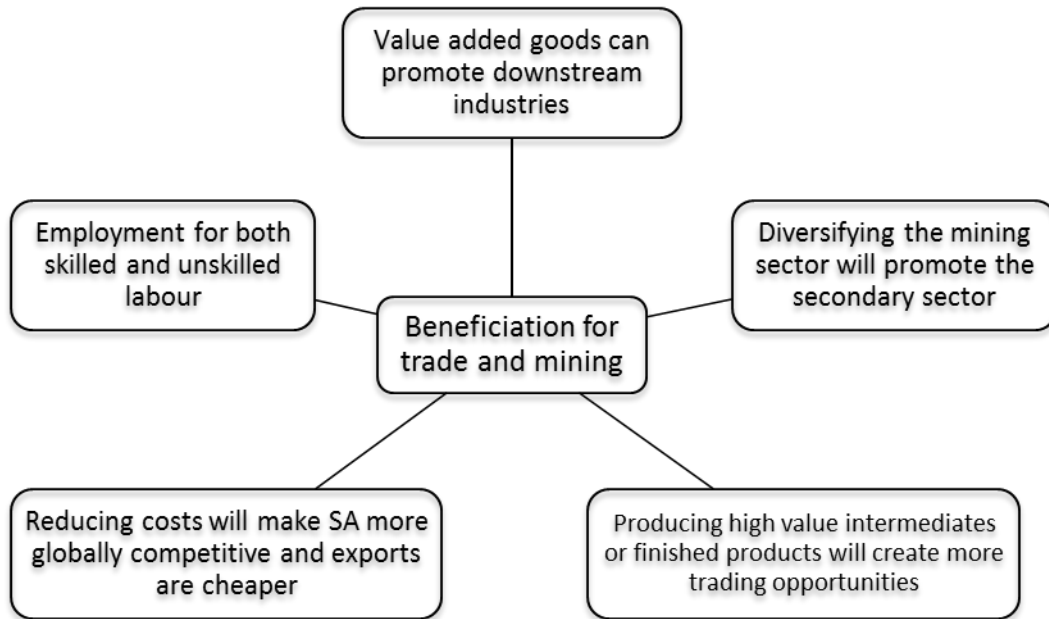
- 5.3.1 (a) **Quaternary** sector is the sector of the economy that covers activities such as training and R & D (Research and Development). Industries involved include high technology (hi-tech) and information services. (2)
- (b) **Globalisation** refers to the analysis of geographical processes and effects at the global scale. It is the ever-increasing global connectivity, integration and interdependence of countries on each other. Example: global corporations supplying the global markets. (2)
- 5.3.2 Similar ICT related industries have the opportunity to be located near each other so that they are able to share markets, intellectual resources, prestige in being located in 'Gauteng Silicon' will help market the company. (2)
- 5.3.3 ICT related businesses, e.g. Business connection; Biosciences and Green technologies, e.g. companies involved with alternative energy. (Any 2 businesses.) (4)
- 5.3.4
- Value of currencies/exchange rates
 - Consumer trends
 - Environmental events: human disasters, floods/droughts, wars
 - Labour issues, strike action
 - Time delays/poor productivity
 - **Investment in SA**
 - **Competition (China)** (6)
- 5.4.1 **GDP** is the total value of goods and services produced within a country within a financial year. (2)
- 5.4.2 (a) Secondary: manufacturing and construction. (2)
- (b) Tertiary: trade and finance. (2)
- 5.4.3 Tertiary sector. (2)
- 5.4.4 (a) Trade: W Cape
- (b) Mining: North West (2)
- 5.4.5 Platinum and Platinum group metals, chrome and gold. **Nickel, cobalt, diamonds, copper, magnesium, vanadium, feldspar** (2 × 2 = 4)

- 5.4.6 (a) **Balance of trade** is the difference in value between all visible imports and visible exports. Visible goods include all goods that you see such as fruit, coal, platinum. (2)
- (b) **Trade surplus** occurs when a country's earnings from exports are greater than their cost of imports. (2)

5.4.7 Brazil, Russia, India, China (any two). (2)

5.4.8 (a) **Beneficiation** is the concentration and downstream value addition of raw material, usually metallic ores, usually close to where they are extracted. E.g. The waste content in the ore is reduced so as to reduce transport costs to the processing plants. Beneficiation strategy refers to boosting the economy and creating jobs by selling processed goods rather than the raw material. (2)

(b) **higher earning potential**



(4 × 2 = 8)

- (c)
- Loss of income for miners and their families
 - Tax revenue drops
 - Dented confidence in SA economy and foreign investment
 - Reduce growth prospects
 - Billions of Rands loss in production
 - Negatively affect the GDP
 - Rand depreciates/exchange rates become volatile
 - **Retrenchment**
 - **Related industries affected**

(3 × 2 = 6)

100 marks

Total: 300 marks