Lesson Description

In this lesson we:

- Work through questions on Climate and Weather, Geomorphology and Settlement Geography.
- Focus on different question answering skills and techniques.

Test Yourself

Question 1

(Adapted from June 2014, Eastern Cape, Paper 1, Question 2.2)

Refer to figure below showing different features and the process of river capture. Choose ONE word/term from the list provided to match each of the following descriptions. Write only the word/term next to the question number.

Before Capture

After Capture

Source: Adapted from Google

misfit stream; wind gap; captor stream; abstraction; rejuvenation; watershed; elbow of capture; captured stream

1.1 A stream that intercepts the water of another stream.
1.2 A stream whose headwaters have been intercepted.
1.3 Stream that is smaller than the valley through which it flows.
1.4 The point where an energetic stream intercepts the water of another stream.
1.5 A dry valley where no stream flows.
1.6 High lying area that separates two different river systems.
1.7 The lowering of the watershed by erosion.
1.8 The process by which a river gains more energy and vertical eroding power resulting in terraced valleys.

(8 x 1) (8)
Improve your Skills

Question 1
Refer to the synoptic weather map below and answer the questions.

1.1 Identify the season which represented by the synoptic chart.

1.2 Give a possible reason for your answer to QUESTION 1.1.

1.3 Provide a suitable term to describe the series of mid-latitude cyclones.

1.4 Describe the weather associated with the cold front of a mid-latitude cyclone.

1.5 Explain the positive impact that mid-latitude cyclones lying to the south east of Cape Town have on tourism in the Western Cape area.

Question 2
Refer to the figure below showing smoke concentration over Tshwane for a period of 24 hours during winter.

[Source: Adapted from Spot On Geography]
2.1 At what time is the smoke concentration the highest? (1 x 1) (1)
2.2 Give ONE possible reason for your answer in QUESTION 2.1. (1 x 2) (2)
2.3 The concentration is lower at 24h00, Suggest a possible reason for this (1 x 2) (2)
2.4 How will the smoke released from the factories affect the temperature over Tshwane? (1 x 1) (1)
2.5 Besides factories, give TWO other contributors of heat in the centre of Tshwane. (2 x 1) (2)
2.6 How will the temperature in the centre of Tshwane differ from the temperature in Faerie Glen (a suburb about 10 km from the city centre)? (1 x 2) (2)
2.7 What health problems will the people who work in the centre of Tshwane experience as a result of the pollution? (2 x 1) (2)
2.8 Suggest ONE possible solution that the municipality of Tshwane can adopt to reduce the amount of pollution over the city. (1 x 2) (2)

Question 3
Refer to the figure below showing the different positions of the upper air inversion layer over South Africa.

3.1 Define the term inversion layer. (1 x 1) (1)
3.2 Which of the diagrams, FIGURE A or B, represents summer months? (1 x 1) (1)
3.3 Give ONE reason for your answer to QUESTION 3.2. (1 x 2) (2)
3.4 Write a short paragraph (approximately 8 lines) explaining how the varying positions of the inversion layer, influences the amount of rainfall received over the South African interior in summer and winter. (4 x 2) (8)
3.5 Suggest how the varying amounts of rainfall over the South African interior in summer and winter, will impact on farming activities there. (1 x 2) (2)
Question 4

Refer to the figure below which shows the rivers profiles as it flows from source to mouth

4.1 Explain the term longitudinal profile  

4.2 State the main type of erosion that occurs in the upper course of this river system.  

4.3 Why is this type of erosion (answer to QUESTION 4.2) dominant in the upper course of the river?  

4.4 (a) At which transverse profile (B or C) will turbulent flow be the higher?  

(b) Explain why this type of flow is evident in this section of the river (Answer to QUESTION 4.4 (a)).  

4.5 Identify a feature, visible in the diagram, associated with the lower course of the river.  

4.6 Using the graphs, explain the relationships between stream discharge and the gradient of the river in the upper and lower courses of the river.  

Question 5

Refer to the case study below and answer the following questions.

Case Study  A catchment management strategy in South Africa  
Source: Geography Study Master

Catchment management is complex. It requires the involvement of a wide range of people – specialists such as hydrologists, river ecologists and engineers, as well as provincial and local authorities and communities – all who represent the competing interests of river users. The formulation of catchment management strategies in South Africa is still in the developmental stage. A good catchment management strategy translates government policy (as outlined in the National Water Act and the Water Services Act for example) into action.
The Breede-Overberg Catchment Management Strategy (Sketch by Examiner)

The Breede-Overberg catchment is situated in the south-west corner of South Africa and includes the southern tip of Africa. It consists of the large, wide Breede River and its tributaries flowing into the Breede estuary, as well as a small number of coastal river flowing into large estuaries or coastal wetland systems. Wide river valleys are flanked by mountain ranges in the north and west and the rolling hills of the Overberg in the south-east. Land use is dominated by commercial agriculture. Coastal towns are important for tourism. The estuaries and rivers of this region are ecologically important for commercial fisheries, recreation and biodiversity conservation. The Breede-Overberg Catchment Management Strategy (CMS) was developed by following these steps:

Assess the situation and identify the problems.

Formulate a vision.

Develop the vision into strategic areas, objectives and measures.

Draw up a timeline for implementation.

5.1 Why is a catchment management strategy so complex? (1 x 1) (1)

5.2 Which government department is responsible for the health and sustainable use of rivers in South Africa? (1 x 1) (1)

5.3 Describe the type of economic activity associated with the Breede river estuary. (2 x 2) (4)

5.4 Suggest why catchment management of the Breede river and Berg river drainage basins would become important to the people living in the Overberg Area. (4 x 2) (8)

Question 6

Refer to the case study below

**Durban’s Plan to Revitalise Inner City**

EThekwini Municipality this week announced far-reaching developments that will revitalise Durban’s inner city and create models to absorb street dwellers and other vulnerable people into mainstream economy. Dalene Menzies, who chairs the central committee of the Chamber of Mines, said the system would make transport accessible to 85 percent of the people. The first phase is to cost R2,4 billion with park-ride facilities and a series of public walkways. She said while some could “only talk about urban decay and how things use to be”, Durban retail was pumping. The plight of vulnerable people affects us all, and a sustainable solution needs a response from all of us. There is a combined initiative by business and government to address social ills so that Durban can live up to its mandate of becoming Africa’s most caring and liveable city by 2030. There will be a new flavour to the Durban experience, and all our citizens will be included in an economic regeneration that will alleviate the worst of social problems.
She says people could help with the transformation by embracing informal trade rather than regarding it as an unavailable evil.

[Source: Adapted from AN article by Vivian Attwood, 14 July 2013]

6.1 Define the term urban renewal. (1 x 1) (1)

6.2 Explain how “park and ride” facilities will help solve the problem in the inner city. (1 x 2) (2)

6.3 Describe TWO possible “social ills” that exist in Durban’s inner city. (2 x 2) (4)

6.4 Suggest ONE environmental problem present in the inner city. (1 x 2) (2)

6.5 Explain how eco cities (green cities) as a sustainable solution, will solve inner city problems. (1 x 2) (2)

6.6 Write a paragraph (approximately 8 lines) on strategies that can be put in place to combat inner city problems overcrowding and traffic congestion. (4 x 2) (8)

Question 7

Study the figure below showing shopping behaviour patterns.

7.1 Define the concept desire line. (1 x 1) (1)

7.2 Provide ONE reason why people are not prepared to travel great distances to purchase convenience goods. (1 x 2) (2)

7.3 State the relationship that exists between the following:
   (a) Number of service centres and the order of goods. (2 x 1) (2)
   (b) Order of service and the maximum distance travelled. (2 x 1) (2)

7.4 Discuss TWO reasons why customers often do not travel to the nearest centre to obtain a particular service. (2 x 1) (2)

7.5 Refer to specialist shops. (6 meters)
   (a) Explain ONE reason why “specialist shops” will have a bigger range. (1 x 2) (2)
   (b) State ONE example of a high order good. (1 x 1) (1)

7.6 Explain the term threshold population. (1 x 1) (1)
7.7 Suppose the threshold population for the “Specialist Shop” is 4 000. Explain when this store will operate at:

(a) a loss

(b) a profit

(2 x 1) (2)  

Question 8

Refer to the case study on land reform changes

LAND REFORM CHANGES

South Africa’s Black Farmers Struggle with Land Reform Elliot Nkompo discusses the trials and tribulations of farming in South Africa after attending to a weak cow struggling to stand after calving. As someone with three decades’ experience as a farm worker he is no stranger to the challenges farming brings. Yet, four years after making the transition from worker to land owner as the beneficiary of a land reform programme.

While the government argues that the pace of land reform has been too slow, many Black farmers like Mr Nkompo, struggle to make a success of their land. Acquiring his own land was the realisation of a once impossible dream for Mr Nkompo after a lifetime toiling for the white farmer. “When we sought the land we knew it was not going to be easy, but we have been shocked, he says. The government has acknowledged problems with land reform, but wants to accelerate the process and plans to dispense with its “willing-buyer, willing-seller” policy. In rural regions most Blacks are living in abject (hopeless) poverty. Many of the black farmers lack the resources to ensure their land is productive. Mr Nkompo has not yet reaped any benefits. Yet, his neighbouring farm has huge irrigation pits and many benefits. The contrast could not be starker.

[Source: Adapted from FINANCIAL TIMES, 5 December 2013]

8.1 Define the term social injustice. (1 x 1) (1)

8.2 Explain ONE of the main aims of the land reform programme in post apartheid South Africa. (1 x 2) (2)

8.3 Mr Nkompo and other farmers says, “When we sought the land we knew it was not going to be easy, but we have been shocked”. Discuss any TWO challenges associated with land reform Black farmers are facing. (2 x 2) (4)

8.4 As part of their land reform programme, the government buys land on a “willing-seller, willing-buyer basis.

(a) Explain what the above statement means. (1 x 2) (2)

(b) Discuss ONE way in which the above principle “willing-seller, willing-buyer has impacted on the land reform process. (1 x 2) (2)

8.5 Many new Black farmers engage in subsistence farming.

(a) Describe ONE characteristic of the type of farming practised by many Black farmers. (1 x 2) (2)

(b) Why is there a need for agricultural reform in South Africa? (1 x 2) (2)