PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper consists of 26 pages and an Insert of 4 pages (i – iv). Detach the Insert from the middle of the question paper. Please check that your question paper is complete.

2. Read the questions carefully.

3. **ANSWER THREE QUESTIONS AS FOLLOWS:**
   - One from Section A – Compulsory question
   - One from Section B
   - One from Section C

4. Credit will be given for the following:
   - Interpretation and explanation; and
   - Evidence of personal observations where this is appropriate to the question.

5. You are encouraged to use sketch maps, diagrams and other explanatory drawings to support your answers wherever relevant.

6. Number your answers exactly as the questions are numbered.

7. Please circle the number of each question answered on the back inside flap of your Answer Book or on the front cover as applicable.

8. It is in your own interest to write legibly and present your work neatly.

9. There is a GLOSSARY of words on page 2 explaining what the words in bold used in the questions mean.

10. Candidates must pay attention to the mark allocation. Unless otherwise indicated, two marks are awarded for a valid response. This means that a question carrying four marks requires two responses.

11. Please hand in this question paper.
<table>
<thead>
<tr>
<th><strong>Account for</strong></th>
<th>To explain why, by giving reasons.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annotate</strong></td>
<td>To label with explanatory notes.</td>
</tr>
<tr>
<td><strong>Calculate</strong></td>
<td>To work out the value of something using a mathematical method.</td>
</tr>
<tr>
<td><strong>Classify</strong></td>
<td>To divide into groups or types.</td>
</tr>
<tr>
<td><strong>Compare</strong></td>
<td>To look at the similarities and differences.</td>
</tr>
<tr>
<td><strong>Complete</strong></td>
<td>To fill in the missing elements.</td>
</tr>
<tr>
<td><strong>Compile</strong></td>
<td>To draw up or put a list together.</td>
</tr>
<tr>
<td><strong>Contrast</strong></td>
<td>To compare from different perspectives.</td>
</tr>
<tr>
<td><strong>Copy</strong></td>
<td>To make an exact replica or copy of something.</td>
</tr>
<tr>
<td><strong>Define</strong></td>
<td>To give the precise meaning of …</td>
</tr>
<tr>
<td><strong>Describe</strong></td>
<td>To give an account of something in words.</td>
</tr>
<tr>
<td><strong>Determine</strong></td>
<td>To settle or decide the amount of / to find the answer of …</td>
</tr>
<tr>
<td><strong>Discuss</strong></td>
<td>To explain by argument the various aspects of a statement.</td>
</tr>
<tr>
<td><strong>Draw</strong></td>
<td>To show by means of a sketch.</td>
</tr>
<tr>
<td><strong>Evaluate</strong></td>
<td>To provide an opinion or judgement with supporting evidence.</td>
</tr>
<tr>
<td><strong>Examine</strong></td>
<td>To look at something carefully; to analyse and to discuss.</td>
</tr>
<tr>
<td><strong>Explain</strong></td>
<td>To describe something so that it can be understood.</td>
</tr>
<tr>
<td><strong>Flow diagram</strong></td>
<td>A series of ideas / concepts linked together to show a process.</td>
</tr>
<tr>
<td><strong>Identify</strong></td>
<td>To give the details or characteristics of something.</td>
</tr>
<tr>
<td><strong>Indicate</strong></td>
<td>To point out / show; to state briefly.</td>
</tr>
<tr>
<td><strong>Justify</strong></td>
<td>To prove something to be valid; to give reasons for your response.</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>To write down; to provide a list of facts or reasons.</td>
</tr>
<tr>
<td><strong>Match</strong></td>
<td>To connect similar things or things that belong together.</td>
</tr>
<tr>
<td><strong>Mind map</strong></td>
<td>Thoughts and ideas brainstormed and linked together.</td>
</tr>
<tr>
<td><strong>Name</strong></td>
<td>To state something; to give; to mention.</td>
</tr>
<tr>
<td><strong>Outline</strong></td>
<td>A general explanation or description of something.</td>
</tr>
<tr>
<td><strong>Predict</strong></td>
<td>To tell something in advance; to foretell of a future event.</td>
</tr>
<tr>
<td><strong>Provide</strong></td>
<td>To put forward or give.</td>
</tr>
<tr>
<td><strong>Recommend</strong></td>
<td>To make an appropriate and relevant suggestion.</td>
</tr>
<tr>
<td><strong>Review</strong></td>
<td>To highlight the important parts of an issue.</td>
</tr>
<tr>
<td><strong>Select</strong></td>
<td>To choose; to decide based on a number of options.</td>
</tr>
<tr>
<td><strong>State</strong></td>
<td>To say something; to write something down.</td>
</tr>
<tr>
<td><strong>Suggest</strong></td>
<td>To propose an idea, explanation or solution by way of a plan.</td>
</tr>
<tr>
<td><strong>Tabulate</strong></td>
<td>To draw up a table.</td>
</tr>
</tbody>
</table>
SECTION A GEOGRAPHICAL ISSUES

COMPULSORY QUESTION FOR ALL CANDIDATES

QUESTION 1 GEOGRAPHICAL CASE STUDY: MCGREGOR, WESTERN CAPE

Study the source material below carefully.

FACT FILE: MCGREGOR

- **Physiography:** McGregor, named after one of the oldest Scottish clans, lies in a valley surrounded by rolling hills. It borders the Little Karoo. McGregor has managed to retain the feel of a 19th century village.
- **Population:** 10 500 people, mainly artists, retirees and unemployed people. The village has grown in recent years.
- **Climate:** Mediterranean – mild and dry summers, cold and wet winters.
- **Key Economic Sectors:** Tourism, agriculture (wine production). A number of artists have set up studios in McGregor, this being an example of counter-urbanisation.

GEOGRAPHICAL SKILLS AND TECHNIQUES

Figure 1: Art Route map of McGregor

[Adapted from <www.wikipedia.com>]

Map scale:
1 cm represents 200 m

[Source: <http://www.artroutemcgregor.co.za/images/art-route-map>]
Figure 2: Synoptic Weather Map for 2012-05-04

[Source: WeatherSA]
1.1 Refer to Figure 1 on page 3.

1.1.1 **Determine** the following:

(Notes: Use the dots as reference points. Use the compass on Figure 1.)

(a) The direction from *Lion House Art Studio* to *Mulberry Studio*.  

(b) The bearing from *Millstone Pottery* to *Manara*.  

(c) The approximate distance (km) from A to B along Voortrekker Road.  

1.1.2 **List** a GIS data layer needed for producing a map such as the one in Figure 1.  

**CLIMATE AND WEATHER**

1.2 Refer to Figure 2 on page 4 and Figure 3 on page (i) of the Insert.

1.2.1 **Identify** the following weather systems on Figure 2.

(a) X  

(b) Y  

(c) Z  

1.2.2 The synoptic weather map for 4 May is typical of early winter weather conditions. **Provide** TWO forms of evidence from the synoptic weather map (besides the date) to support this statement.  

1.2.3 Weather system X (Figure 2) is in the mature stage of development. Use diagrams to **explain** how it got to this stage.  

1.2.4 Refer to Figure 3 in the Insert, the *meteogram* for McGregor. A *meteogram* is a graph that shows meteorological data for a specific weather station on the ground over a period of time.  

**Copy and complete** the table below for 00:00 for Friday, 4 May 2012.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Air temperature (°C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Air pressure (hPa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Rainfall (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>Wind direction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.3 Read the extract and study Figure 4, a flood hydrograph.

**McGregor's Water Supply**

- The village gets its water straight from the natural source up in the mountains.
- Rivers are being cleared of alien vegetation and water supply facilities upgraded. Once this project is completed, McGregor should have an adequate water supply for the next twenty years.
- The Houtbaai River runs on the edge of McGregor and supplies the Leiwatert Dam providing water for the town.

**Ring-barking, which kills alien trees, along the banks of the Houtbaai River upstream from McGregor**

**Canals transfer water to surrounding farms**

[Adapted from Siyabonafrica; Examiner's photographs]

**Figure 4: Flood hydrograph**

[Source: <http://www.geogonline.org.uk>]
1.3.1 **Provide** labels for Figure 4 on page 6. Select from the following words:

- lag time
- peak discharge
- base flow
- storm flow
- run-off
- precipitation
- receding limb
- rising limb

(a) A = (1)
(b) B = (1)
(c) C = (1)
(d) D = (1)
(e) E = (1)
(f) F = (1)

1.3.2 Refer to the source material and **compile** a **flow diagram** to **explain** how the methods being used would increase the discharge of the Houtbaai River and thereby the supply of fresh water to McGregor. (8)

1.3.3 **Predict** how transferring water by means of canals can influence base flow. (2)

**MCGREGOR'S LOCATION AND RURAL DEPOPULATION**

1.4 Refer to Figure 1 on page 3 and Figure 5 below:

**Figure 5: Website Header for the McGregor Art and Poetry Festival**

![Image of McGregor Art and Poetry Festival]

[Source: Examiner]

1.4.1 **List** TWO factors that influenced the choice of McGregor's original site. (4)

1.4.2 **Explain** why McGregor is classified as a **village**. (2)

1.4.3 **Name** the dominant street pattern of McGregor (Figure 1, page 3). (2)

1.4.4 **Discuss** the settlement concept of 'functional magnetism' with reference to Figure 1, page 3. (4)
1.4.5 (a) **Explain** the meaning of 'counter urbanisation' (Fact File, page 3). (2)

(b) Festivals such as *The McGregor Art and Poetry Festival* attract many tourists to McGregor.

Write an essay of approximately 1 – 1½ pages in which you **evaluate** sustainable strategies other than festivals to solve depopulation and unemployment in small towns. Use the following subheadings:

- Factors causing rural depopulation
- Examples of sustainable strategies to promote 'counter urbanisation' (other than festivals)
- Evaluation of suggested sustainable strategies

*Marks will be awarded for structure, planning and adherence to suggested subheadings.*

**ECONOMIC ACTIVITIES: FARMING AND TRADE**

**SA wine industry 'Creator of economic growth'**

6 February 2010

- The South African wine industry's annual contribution to the economy grew to R26.2 billion or 2.2% of **gross domestic product** (GDP).
- "Wine is firmly established as the leader in exports from the agricultural sector, and is second only to minerals and motor cars, with the growth in exports substantially contributing to the rise in the industry's contribution to national GDP," says SAWIS' chief executive Yvette van der Merwe.
- Primary agricultural output valued at R3.3 billion was **beneficiated** and **added in value** downstream to the value of R19.2 billion – about five times the initial value of the raw materials – while another R4.3 billion is generated indirectly through wine tourism.
- What is also important to note is the measure of value added that takes place with every step of beneficiation, says SAWIS. Starting at farm level, the initial value of the raw material in terms of income created, amount to R3.4 billion and ultimately leads to a total GDP value of R21.7 billion, excluding tourism.

[Adapted from: <www.southafrica.info/business/economy>]

**Figure 6: Value chain of Wine Dependent GDP in South Africa (How the wine industry benefits other sectors of the economy)**
1.5 Refer to Figure 6 and the extract on page 8.

1.5.1 **Define** the following terms:

(a) Gross Domestic Product (GDP)  

(b) Beneficiation  

1.5.2 Refer to Figure 6 and **classify** by economic sector:

(a) Agriculture  

(b) Tourism  

1.5.3 Giving examples, **explain** how the wine industry promotes the tourism sector of South Africa's economy.  

1.5.4 **Suggest** TWO factors that could negatively impact on the percentage contribution of agriculture (Figure 6).  

1.5.5 **Discuss** how changes in the exchange rate can influence the wine industry's contribution to the GDP.  

100 marks

**END OF COMPULSORY QUESTION**
SECTION B  NATURAL ENVIRONMENTS

Answer EITHER Question 2 OR Question 3.

QUESTION 2  SYNOPTIC WEATHER MAP, FLUVIAL GEOMORPHOLOGY, RIVER CAPTURE, LANDFORMS AND URBAN CLIMATE

2.1 Study Figure 7, a synoptic weather map for 2012-03-11 (page 11) and Figure 8 (page 12), a route map of the Cape Argus Cycle Tour. Read the extract below.

The Cape Argus Pick n Pay Cycle Tour is a challenging race, especially with respect to weather conditions. In 2012, strong winds were experienced around Cape Point, with wind speeds of 40 km/h and along Chapman's Peak slightly weaker winds of 25 km/h. Heat was not a problem during this year's race as the wind had a 'cooling effect'. One blog comment stated: 'The weather today was almost perfect!'

2.1.1 **Identify** the following on Figure 7 (page 11):

(a) pressure cells labelled A and B

(b) weather feature C

2.1.2 **Predict** the impact the feature labelled C will have on Cape Town's weather in the next 48 hours.

Refer to Figure 7 and Figure 8.

2.1.3 **Select** the correct answer from the options given. Simply write down the question number and the correct letter, for example 2.1.3 (a) A.

(a) The southeasterly wind that frequently blows over Cape Town is also called …

A a doldrum
B a berg wind
C the Cape Doctor
D an anabatic wind

(b) The average afternoon temperature for the race was ...

A 17 °C
B 29 °C
C 34 °C
D 13 °C

2.1.4 (a) **Account for** the southeasterly winds being experienced in the Cape Peninsula on the day of the race.

(b) **Explain** why both the speed and direction of the wind are important to the competitors in a cycle race such as this.
Figure 7: Synoptic weather map for 2012-03-11

[Source: Weather SA]
Figure 8: Route map of the Cape Argus Cycle Tour

Camps Bay to Greenpoint:
- Weather: Clear skies
- Wind: S/SE 25 km/h (moderate)
- Early morning: 18 °C
- Afternoon: 32 °C

Chapman’s Peak to Camps Bay:
- Weather: Clear skies
- Wind: 25 km/h (moderate)
- Early morning: 18 °C
- Afternoon: 31 °C

Kommetjie to Chapman’s Peak:
- Weather: Clear skies
- Wind: SE 25 km/h; 45 in places (moderate; gusting strong in places)
- Early morning: 16 °C
- Afternoon: 29 °C

Cape Point to Kommetjie:
- Weather: Clear skies
- Wind: SE 45 km/h (strong)
- Early morning: 17 °C
- Afternoon: 27 °C

Cape Town City Bowl to Muizenberg:
- Weather: Clear skies
- Wind: SE 15 km/h (light)
- Early morning: 17 °C
- Afternoon: 31 °C

Muizenberg to Simonstown:
- Weather: Clear skies
- Wind: SE 20 – 30 km/h (moderate-fresh)
- Early morning: 17 °C
- Afternoon: 28 °C

Simonstown to Cape Point:
- Weather: Clear skies
- Wind: SE 40 km/h, 50 in south (strong)
- Early morning: 16 °C
- Afternoon: 26 °C

[Source: South African Weather Service]
2.2 Study Figure 9, a map of the Gouritz River drainage area.

Figure 9: Gouritz River drainage area

2.2.1 Locate the Gamka drainage basin in Figure 9.

(a) Give the stream order of the Gamka River at A. (4)

(b) Draw a fully labelled longitudinal profile of the Dwkya River from B to C. (6)

(c) Compare the Gamka and the Eastern Southern Cape drainage basins in terms of:
   - size
   - shape
   - drainage density (6)

(d) Refer to the Olifants drainage basin and study the hydrographs D and E below.

Match either hydrograph D or E with the Olifants drainage basin. Justify your answer. (4)
RIVER CAPTURE

2.3 Study Figure 10. This shows 'before' and 'after' river systems in the Gamka River drainage area.

Figure 10: 'Before' (Diagram A) and 'After' (Diagram B) river systems in the Gamka River drainage area

2.3.1 Name the drainage pattern of the Gamka River in Diagram A. (2)

2.3.2 (a) Name the process that is occurring at P (Diagram A). (2)

(b) Identify the feature formed at Q in Diagram B. (2)

(c) Describe TWO factors which enabled the Gouritz River to capture both the Dwyka and Gamka rivers. (4)

Refer to Figure 10, Diagram B.

2.3.3 (a) State whether the present river system is an example of antecedent or superimposed drainage. (2)

(b) Justify your answer in Question 2.3.3 (a), using evidence from Figure 10. (4)
**LANDFORMS**

2.4 Study Photograph 1 on page (i) in the Insert of a typical landform in the Free State.

2.4.1 **Identify** the landform in Photograph 1. (2)

2.4.2 **Describe** TWO characteristics of this landform. (4)

2.4.3 With the aid of annotated sketches, **explain** what will happen to this landform over a long period of time. (8)

2.4.4 There is evidence of mass wasting in Photograph 1. **Explain** the factors contributing to the accumulation of boulders on the talus slope. (6)

**MICROCLIMATE**

2.5 Study Figure 11, an isotherm map of Tel Aviv, Israel. The temperatures are recorded in °C at 21:00 in June 2011.

**Figure 11: Isotherm map of Tel Aviv, Israel**

2.5.1 What urban microclimate concept is illustrated in Figure 11? (2)

2.5.2 (a) Where are the coolest temperatures found in Tel Aviv? (4)

(b) **Account for** the shape of the isotherm pattern on Figure 11. (4)

2.5.3 **Explain** why the night-time temperatures remain warm. (4)

2.5.4 Study Photograph 2, a street scene in Bangkok, on page (ii) in the Insert.

**Compile a mind map to suggest** how cities, as shown in Photograph 2, can solve problems associated with urban climate. (10)
OR

QUESTION 3 CLIMATE AND WEATHER, FLUVIAL PROCESSES AND LANDFORMS

TERMINOLOGY: GLOBAL CIRCULATION

3.1 **Match** the word(s) in column A with the statement in column B. Write ONLY the number and correct letter, e.g. 1 – A.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Polar cell</td>
<td>A Winds deflected to the right in the southern hemisphere.</td>
</tr>
<tr>
<td>2 Inter Tropical Convergence Zone</td>
<td>B Results in deflection caused by the Earth's rotation.</td>
</tr>
<tr>
<td>3 Hadley cell</td>
<td>C Area of dominant LP at 0° latitude.</td>
</tr>
<tr>
<td>4 Pressure gradient force</td>
<td>D The tropical cell.</td>
</tr>
<tr>
<td>5 Jet streams</td>
<td>E Winds deflected to the left in the southern hemisphere.</td>
</tr>
<tr>
<td>6 Ferrel's Law</td>
<td>F Low level westerly winds.</td>
</tr>
<tr>
<td>7 Coriolis Force</td>
<td>G Area of dominant HP at 90° latitude.</td>
</tr>
<tr>
<td>8 Doldrums</td>
<td>H Causes air to move from HP to LP.</td>
</tr>
<tr>
<td></td>
<td>I High-level easterly winds.</td>
</tr>
<tr>
<td></td>
<td>J The mid-latitude cell.</td>
</tr>
<tr>
<td></td>
<td>K Heat Equator.</td>
</tr>
<tr>
<td></td>
<td>L High-level westerly winds.</td>
</tr>
</tbody>
</table>

(16)
TROPICAL CYCLONES

Fact file: Typhoon Megi

Typhoon Megi occurred in mid-October 2010 in the Pacific Ocean.

Megi killed 31 people and caused catastrophic damage in the Philippines, making it one of the costliest typhoons in the area.

After moving to the South China Sea, the outflow of Megi and a weather front together brought torrential rainfall and killed a further 38 people, making Megi the deadliest typhoon of 2010.

On October 17, evacuations began with hundreds of people fleeing from towns in the Philippines as Megi intensified into a super typhoon. Later on that day, all state schools and colleges were closed.

Typhoon Megi turned north-northeastward and started to weaken because of colder sea surface temperatures in the northern South China Sea.

[Adapted from: <www.en.wikipedia.org>]

3.2 Refer to Figure 12 on page (ii) in the Insert and the fact file above.

3.2.1 (a) How many typhoons were there before Typhoon Megi in 2010? (2)

(b) Indicate why Megi is not referred to as a hurricane. (2)

3.2.2 Account for the path taken by Typhoon Megi. (See Figure 12 – Insert) (4)

3.2.3 List the conditions necessary for Megi to mature from a Tropical Depression to a category 5 Typhoon. (4)

3.2.4 Discuss THREE characteristics of a super typhoon. (6)

3.2.5 Explain why Megi was no longer a super typhoon at place A (Figure 12 – Insert). (4)

3.2.6 Suggest what measures the Philippines' authorities could put into place to reduce the impact of typhoons such as Megi. (6)

CLIMATES AT A LOCAL SCALE

3.3 Refer to Photograph 3 on page (iii) in the Insert.

3.3.1 Identify the local weather phenomenon shown by the dotted line in Photograph 3. (2)

3.3.2 Draw and annotate a diagram to explain how this local weather phenomenon occurs. (8)

3.3.3 Predict the winds that are likely to occur in the early morning in the same valley. (2)

3.3.4 Suggest why this weather phenomenon in Question 3.3.1 is not likely to occur in summer. (4)
MASSIVE LANDFORMS

3.4 Refer to Photograph 4 on page (iii) in the Insert.

3.4.1 **Identify** the landforms in Photograph 4 on page (iii) in the Insert. (2)

3.4.2 **State** whether the following statements are True or False, referring to Photograph 4:

(a) These landforms mainly occur in jointed metamorphic rock. (1)

(b) Core stones originate from the parent rock. (1)

(c) These landforms can only form below the Earth's surface. (1)

(d) These landforms are usually made up of shale and sandstone. (1)

FLUVIAL PROCESSES AND FLOODING

Figure 13: Three different river courses

3.5 3.5.1 **Tabulate** TWO characteristics of each of the three main river courses A, B and C (Figure 13). (6)

3.5.2 **Predict** along which one of the three courses (A, B or C) widespread flooding will most likely occur. (2)

3.5.3 **Justify** your answer for Question 3.5.2. (4)

3.5.4 **Discuss** TWO environmental advantages of flooding. (4)

3.5.5 By means of a **flow diagram, evaluate** THREE methods of flood prevention that can be introduced to reduce the detrimental environmental and socioeconomic impacts of floods. (14)

[100] 100 marks
SECTION C  HUMAN ENVIRONMENTS

Answer EITHER Question 4 OR Question 5.

QUESTION 4  PEOPLE AND PLACES, PEOPLE AND THEIR NEEDS

TERMINOLOGY

4.1 Column A lists various concepts of settlement geography. Explanations of these concepts are listed in Column B. Match the correct explanation to the concept. Write only the number and the corresponding letter on the answer script, for example: 4.1.1 – A.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 Decentralisation</td>
<td>A  A concentration of mixed land-use activities outside the urban area.</td>
</tr>
<tr>
<td>4.1.2 Sphere of influence</td>
<td>B  Handles small amounts of material per worker involved and does not generally cause much pollution.</td>
</tr>
<tr>
<td>4.1.3 Façadism</td>
<td>C  Minimum number of people required for a service to be sustained.</td>
</tr>
<tr>
<td>4.1.4 Central place</td>
<td>D  The maximum distance people are prepared to travel in order to obtain a service.</td>
</tr>
<tr>
<td>4.1.5 Threshold population</td>
<td>E  Large-scale production of goods which are large in size.</td>
</tr>
<tr>
<td>4.1.6 Invasion and succession</td>
<td>F  The front of a building is retained while the remainder of the building is knocked down.</td>
</tr>
<tr>
<td>4.1.7 Rural-urban fringe</td>
<td>G  Settlement that provides goods and services to the surrounding area.</td>
</tr>
<tr>
<td>4.1.8 Urban expansion</td>
<td>H  Buildings not kept in a good state of repair.</td>
</tr>
<tr>
<td>4.1.9 Light industry</td>
<td>I  Where land use in a city is no longer appropriate, a new land use can take over the original function and succeed it.</td>
</tr>
<tr>
<td>4.1.10 Urban decay</td>
<td>J  The movement of services and businesses out of a central business area into peripheral centres.</td>
</tr>
<tr>
<td></td>
<td>K  Houses and cottages which are modernised and improved.</td>
</tr>
<tr>
<td></td>
<td>L  The process that takes place when urban areas expand into the surrounding rural areas.</td>
</tr>
</tbody>
</table>
4.2 Study Figure 14 on page (iv) of the Insert, showing settlement patterns near Flagstaff, Eastern Cape and Photograph 5, a school at settlement B, marked on Figure 14 on page (iv) of the Insert.

4.2.1 **Classify** the settlements labelled A and B on Figure 14 (Insert). (4)

4.2.2 (a) **Copy** and complete the table to **compare** the site and situation of settlements A and B (Figure 14).

<table>
<thead>
<tr>
<th>Settlement A</th>
<th>Settlement B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td></td>
</tr>
<tr>
<td>Situation</td>
<td></td>
</tr>
</tbody>
</table>

(b) Many people living in the area (Figure 14) are subsistence farmers.

Write a paragraph in which you **describe** the farming activities in this area in terms of:

- factors favouring subsistence farming
- advantages of this type of farming
- disadvantages of this type of farming

(c) In your opinion, do these communities enjoy food security? **Justify** your answer. (4)

4.2.3 The town Flagstaff is about 31 km from KwaDick. What services would attract the residents of KwaDick to travel to Flagstaff? (4)

4.2.4 A healthcare clinic is being built at KwaDick (settlement B, Figure 14).

(a) **Identify** TWO benefits of building a clinic in this area. (4)

(b) **Describe** TWO challenges that may be experienced with operating a clinic in this area. (4)

(c) **Discuss** TWO practical, sustainable solutions to overcome the challenges mentioned in Question 4.2.4 (b). (8)
INDUSTRIAL LOCATION

4.3 Study Figure 15, the Fact File and location map of Dube Tradeport, La Mercy, KwaZulu Natal.

Figure 15: Fact File and location map of Dube Tradeport

Fact File
- Dube Tradeport* is to be an aerotropolis – a new urban form placing airports in the centre with cities growing around them.
- The area stretches from north of Durban to Ballito.
- This creates a potential to boost economic development and jobs in the area.
- An agrizone has been created which focuses on the use of limited growing space for the production of high volumes of quality produce.
- Glass-houses are used for farming.
- In a pilot project the agrizone has produced tomatoes and cucumbers, and more recently peppers.
- This project has drawn export interest from the European Union.
- In 2010 the new King Shaka International Airport moved from the old Durban International Airport.

* A tradeport is an economic and infrastructural development providing investment opportunities to the surrounding region.

4.3.1 (a) Outline THREE factors that influenced the move from the old Durban Airport to the new King Shaka International Airport at La Mercy in 2010. (6)

(b) State THREE factors of location that influenced the development of the Dube Tradeport. (6)

4.3.2 Explain whether the small scale farmers in the area will benefit or not from the establishment of an agrizone at the Dube Tradeport. (4)
WATER CRISIS – GAUTENG NEEDS WATER NOW

4.4 Study Figure 16, an extract and map of dams in Lesotho.

Figure 16

Extract and map – Dams in Lesotho

Lesotho Highlands Water Project extension gets the nod

- Water demand in the Gauteng area has exceeded the capacity of the Vaal River system.
- To avoid water restrictions by 2014, urban water-management must reduce water consumption by 15%.
- The government has given the nod to the second phase of the Lesotho Highlands Water Project (LHWP).
- Polihali Dam is part of Phase II of the project, valued at R7,3 billion. It should be completed by 2019.
- At present the LHWP supplies 46 million cubic metres of water a year.
- Phase II would raise the supply to 70 million cubic metres a year.
- 180 million cubic metres of water is illegally siphoned off by mining operations, irrigation, failing municipal water systems and by water leaking from taps and valves.

[Source: Sunday Times]

4.4.1 What is a water transfer scheme? (2)

4.4.2 Suggest how urban water-demand management can be introduced in cities in Gauteng to reduce the consumption of water by 15%. (8)

4.4.3 The illegal use of water is more than the water purchased from Phase 1 of the LHWP. Recommend how the Department of Water Affairs and Forestry can address this problem. (8)

4.4.4 Outline the possible benefits of Phase II of the LHWP to Lesotho. (4)

OR
QUESTION 5  
PEOPLE AND PLACES: RURAL AND URBAN SETTLEMENTS, PEOPLE AND THEIR NEEDS: PRIMARY ACTIVITIES, MANUFACTURING REGIONS AND FOREIGN TRADE

SETTLEMENT TERMINOLOGY

5.1   Multiple choice. Select the correct answer from the options below. Write only the question number and correct letter, e.g. 5.1.1 A.

5.1.1   Rural settlements can be ...

A multidimensional.
B nucleated and dispersed.
C involved in secondary activities.
D a concentration of high order activities.

5.1.2   The minimum number of customers needed to keep a service such as a fast food outlet profitable is its ...

A range.
B hinterland.
C sphere of influence.
D threshold population.

5.1.3   The land use zone found on the outer ring on the Burgess Concentric Zone model is …

A low income residential.
B medium income residential.
C high income residential.
D wholesale light manufacturing.

5.1.4   A dry point settlement is …

A the area or region served by a settlement.
B the area that meets the needs of a farmer.
C located on higher ground, away from a flood plain.
D located around a source of water supply in a dry area.

5.1.5   Land reform is when …

A land is leased by large organisations to people.
B land is given to people so there is security of ownership.
C land is purchased from disadvantaged people in rural areas.
D land is sold back to people from whom it was removed during Apartheid.
RURAL SETTLEMENT AND FARMING

5.2 Refer to Photograph 6 on page (iv) in the Insert, a farm near Swellendam, Western Cape.

5.2.1 **Classify** this rural settlement in terms of size and pattern. (4)

5.2.2 **Describe** factors that contributed to the site of this settlement. (4)

5.2.3 **Identify** the type of farming that takes place in Photograph 6 as commercial or subsistence. (2)

5.2.4 The settlement in Photograph 6 practises a form of **monoculture**.

(a) **Define** monoculture. (2)

(b) **Outline** an advantage and disadvantage of practicing monoculture in South Africa today. (4)

URBAN ISSUES: HILLBROW, INNER CITY JOHANNESBURG, GAUTENG

Figure 17: Typical street scene in Hillbrow, Johannesburg

5.3 5.3.1 **Identify** the economic activity illustrated in Figure 17. (2)

5.3.2 **Tabulate** the advantages and disadvantages of this type of economic activity for the local economy in the inner city, e.g. Hillbrow. (8)
5.3.3 'Johannesburg's inner city improvement districts have been attempting to take back central Johannesburg from decay for some years and show that the process is achievable. An example of which is the Hillbrow Precinct.' (Urban Green File, December 2011).

Write an essay of 1 – 2 pages in which you compare and contrast inner city Johannesburg (or any inner city you may be familiar with) before and after city improvement districts were implemented.

Consider the following headings in your essay structure:
- Factors that lead to urban decay
- City improvement districts – what they aim to do
- Agenda 21 principles (sustainable cities)

Marks will be awarded for structure, planning and adherence to sub-headings. (16)

LOCATION OF SECONDARY ACTIVITIES

5.4 Refer to Figure 18, an advertisement for Coega IDZ, Port Elizabeth, Eastern Cape.

Figure 18: Advertisement for Coega IDZ, Port Elizabeth, Eastern Cape

[Source: Sunday Times, 18 March 2012]

5.4.1 List TWO other important industrial (manufacturing) regions in South Africa, besides Coega (Port Elizabeth). (4)

5.4.2 Explain what an Industrial Development Zone (IDZ) is. (2)

5.4.3 By means of a mind map, discuss the factors that influence the location of industry in general. (10)

5.4.4 Why would industries be attracted to the Coega IDZ? (6)

5.4.5 Predict how the Port of Ngqura will help reduce unemployment in the Eastern Cape. (6)
INTERNATIONAL TRADE: BRICS

Fact File: BRICS

In 2011, South Africa joined an elite group of the new emerging economic power grouping known as BRICS – Brazil, Russia, India, China and now South Africa.

The G7 (now the G8) is a forum for the governments of eight large economies (France, United States, United Kingdom, Russia, Germany, Japan, Italy and Canada).

What began as a loose grouping of emerging and populous economies is rapidly changing into a more coherent power group that reflects the shifting balance of power in the global economy.

[Adapted from BRICS or Break, Skyways, February 2012]

5.5 Refer to Figure 19.

Figure 19: Number of people entering the middle class income bracket (BRICS)

5.5.1 Define the following terms:

(a) An emerging economy

(b) The global economy

5.5.2 How much do people have to earn (US dollars) to be classified as entering the middle class income bracket?

5.5.3 Explain why South Africa does not feature on the graph in Figure 19.

5.5.4 (a) What is a country’s balance of payments?

(b) Suggest how South Africa’s balance of payments could benefit from joining BRICS.

Total: 300 marks