CLIMATOLOGY

1 (a) Study Fig. 1, which shows a weather instrument and answer the questions that follow.

![Weather instrument diagram]

(i) Identify the instrument in Fig. 1. [1]
(ii) Write down X and Y and next to it indicate the name of the instrument part. [2]
(iii) Which weather element is measured with this instrument? [1]
(iv) State the unit of measurement in which readings taken with this instrument is expressed. [1]
(v) Describe how this instrument works. [2]

(b) Study Fig. 2, which shows clouds and answer the questions that follow.

![Clouds image]

(i) Which unit of measurement is used to express cloud cover? [1]
(ii) How do we determine the amount of cloud cover in the atmosphere? [1]
(c) Study Fig. 3 and answer the questions that follow.

![CROSS-SECTION:](image)

**Fig. 3**

(i) Write down Windhoek and Swakopmund and indicate next to it which pressure system would occur when east wind/berg wind conditions are experienced along the coast. [2]

(ii) What influence will the east wind/berg wind have on the temperature of Swakopmund. [1]

(iii) Use Fig. 3 to explain how the east wind/berg wind develops. [3]

[15]
ECOLOGY

2 (a) Select from the list below the correct term to match each of the descriptions and write only the term next to the question number in your answer book.

<table>
<thead>
<tr>
<th>acid rain</th>
<th>CFC’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>carbon dioxide</td>
<td>overcrowding</td>
</tr>
<tr>
<td>deforestation</td>
<td>overgrazing</td>
</tr>
<tr>
<td>contour ploughing</td>
<td>over population</td>
</tr>
<tr>
<td>global warming</td>
<td>reforestation</td>
</tr>
</tbody>
</table>

(i) A gradual increase in the average global temperatures caused by pollutant gasses. [1]
(ii) The most important pollutant gas causing the breakdown of the ozone layer. [1]
(iii) The process by which more trees are cut down than can be replaced. [1]
(iv) An example of good land management which prevents soil erosion. [1]
(v) When the population grows so fast that it cannot be sustained by the resources of a country any more. [1]

(b) Use the diagram of desertification, Fig. 4, below and answer the questions that follow.

(i) What is desertification? [1]
(ii) Identify one human and one natural cause of desertification shown in Fig. 4. [2]
(iii) How can all Namibians contribute to the reduction of desertification? [3]
(c) Study Fig. 5 and answer the questions that follow.

Fig. 5

(i) Identify the type of pollution in Fig. 5.  

(ii) Suggest measures which the local authorities or municipalities can take to reduce this type of pollution.
3 (a) Diagrams A and B in Fig. 6 show two plate boundaries.

(i) Write down A and B on your answer sheet and next to it the type of plate boundaries shown in Fig. 6. [2]

(ii) Name the type of landform in diagram B, Fig. 6. [1]

(iii) Use diagram B in Fig. 6 to explain why volcanoes regularly occur at this plate boundary. [3]
(b) Fig. 7 shows exfoliation, a type of physical/mechanical weathering, that usually occur in a dry area like a desert.

![Fig. 7](image)

(i) Define the term *weathering*. [1]
(ii) Use Fig. 7 and describe this process of physical/mechanical weathering. [3]

(c) Fig. 8 shows a picture of an active volcano.

![Fig. 8](image)

(i) What is meant by an *active volcano*? [1]
(ii) When will a volcano be regarded as an extinct volcano? [1]
(iii) List **three** positive effects volcanoes may have on an area or region. [3] [15]
POPULATION GEOGRAPHY

4  (a)  Fig. 9 shows the population of the world in 1950 and the projected increase by 2025.

**Fig. 9**

(i)  Which part of the world shows the smallest population during 1950?  [1]

(ii) Identify the part of the world which shows a decrease in population growth from 1950 to 2025.  [1]

(iii) Which part of the world shows a projected increase of 9% population growth from 1950 to 2025?  [1]

(iv) Give three reasons why some parts of the world has a high population growth.  [3]

(b) Fig. 10 shows the birth rate in different countries.

**Fig. 10**

(i) Which factors contribute to small family sizes in developed countries?  [2]

(ii) Name difficulties which large families in developing countries might experience.  [2]

(iii) What measures could be introduced by developing countries to discourage/reduce large families?  [3]
(c) Fig. 11 shows the rise of super cities in the world.

<table>
<thead>
<tr>
<th>year</th>
<th>city</th>
</tr>
</thead>
</table>
| 1950 | New York  
       | London |
| 1975 | New York  
       | Tokyo   
       | Los Angeles  
       | London  
       | Mexico City  
       | Shanghai  
       | São Paulo |
| 1995 | São Paulo  
       | Beijing  
       | Shanghai  
       | Paris  
       | Bombay  
       | Calcutta  
       | Tokyo  
       | Seoul  
       | Mexico  
       | Los Angeles  
       | New York  
       | Buenos Aires |

Cities with more than ten million inhabitants

(Complete Geography, Oxford, pg166)

**Fig. 11**

(i) How many more super cities were there in 1975 than in 1950? [1]

(ii) Why was London not included in the list of super cities in 1995? [1]

[15]
Read the article Fig. 12, which was published in the Namibian newspaper and answer the questions.

**URBAN DRIFT CREATES MAJOR HEADACHE**
Absalom Shigwedha

The Windhoek Municipality cannot stop the increasing migration of people from rural areas to the city because freedom of movement is enshrined in the Namibian Constitution, says the City’s Deputy Mayor.

The Deputy Mayor said people perceived freedom of movement as an opportunity to improve their living standards.

The Deputy Mayor was speaking at a launch yesterday of a study on the urban environment in Windhoek. “As a result, those living in overcrowded conditions in Khomasdal and Katutura moved onto vacant land nearby, and many others migrated from rural areas throughout the country,” said the Deputy Mayor.

The Deputy Mayor said new residents in informal settlements were vulnerable, had no security of tenure and were living in very unhygienic conditions with no accessible water or sewerage facilities. The Deputy Mayor noted that the annual population growth rate in Windhoek was 5,4 per cent of which 3,9 per cent can be attributed to migration. “This translates into some 600 people moving into Windhoek each month. Roughly one third of the migrants settle in the informal areas, namely the north-western suburbs that developed from Katutura township,” the Deputy Mayor explained.

The Deputy Mayor said 70 per cent of Windhoek’s population was housed in this part of the city. The Deputy Mayor said the physical and economic outlook for residents in the north and northeast Windhoek was bad. The City was battling to keep up with the demand for land, services and proper infrastructure.

Between 1991 and 2001, the Deputy Mayor said, the City Council tried to provide 6 000 serviced plots, but this was still far below the existing need.

(Adapted from the Namibian: 1 March 2002)

**Fig. 12**

(i) Why, according to the article Fig. 12, is it difficult to stop the migration of people to Windhoek? [1]

(ii) Mention three reasons that force people to move to towns and cities? [3]

(iii) Indicate three problems according to Fig. 12 that people living in informal settlements experience. [3]
(b) Study Fig. 13, which shows information about HIV and AIDS in Namibia and answer the questions that follow.

**Knowledge of HIV and AIDS:** Studies have found that general awareness of HIV and AIDS in Namibia is relatively high.

For example: among young people ages 15 – 24, 82% of young women and 87% of young men knew that a healthy looking person could be infected with HIV.

However, significant stigma and misconceptions about HIV remain. Recent studies suggest that HIV prevalence rates are highest among people ages 25 – 29, and lowest among young people under age 20. Among young people ages 15 – 24, women are most affected – the estimated number of young women living with HIV and AIDS was more than twice that of young men.

There is significant variation of HIV prevalence rates across the country. The highest HIV prevalence rates have been found in Katima Mulilo, Swakopmund and Grootfontein, while Opuwo has the lowest HIV prevalence rate.

Higher HIV prevalence rates were also found in those rural sites with main transportation routes nearby.

**Access to Antiretroviral Therapy (ART):** Access to ART is more widespread in Namibia than in much of sub-Saharan Africa. As of June 2005, an estimated 17 000 people were receiving ART in Namibia, or 53% of the 32 000 people estimated by the World Health Organisation (WHO) to be in need of ART as of December 2004; this compares to 11% of those in need in the sub-Saharan African region overall.


**Fig. 13**

(i) Use your own knowledge and state one awareness campaign of HIV and AIDS launched in Namibia. [1]

(ii) Which town in Namibia has the lowest HIV prevalence rate? [1]

(iii) Which measure is in place to prolong the lives of those living with HIV and AIDS. [1]

[10]
REGIONAL GEOGRAPHY

6 (a) Study Fig. 14 and answer the questions that follow.

Fig. 14

(i) Name the physiographic region labelled A?
(ii) Identify the river at B.
(iii) Which neighbouring country will we find at C?
(iv) State the most common natural vegetation found at D.
(b) Study Fig. 15 and answer the questions that follow.

**Fig. 15**

(i) Identify the factor which influence the climate of Namibia in Fig. 15. Explain how this factor influence the climate of Namibia. [3]

(ii) Except for the factor mentioned in (i), name three factors which influence the climate of Namibia. [3]

[10]
7 (a) Fig. 16 shows one of the main methods how fish are caught in Namibian waters.

Fig. 16

(i) What is this method of fishing called in Fig. 16? [1]
(ii) Describe the method mentioned in 7 (a) (i). [2]
(iii) What sort of fish is caught by this method shown in Fig. 16? [1]
(iv) Identify one example of this type of fish named in (iii). [1]

(b) What measures are introduced by the Namibian Government to protect its fishing marine resources? [2]

(c) Give three reasons why fishing is important for the economy of Namibia. [3]