INSTRUCTIONS TO CANDIDATES:
(To be read out by the External Invigilator before the start of the examination)

There are 46 questions in this paper worth 50 marks. Attempt ALL questions, even if you are not sure of some of the answers.

The Examination is divided into three parts:

- **PART A:** Multiple Choice  (Questions 1 to 25)
- **PART B:** Short Answer  (Questions 26 to 45)
- **PART C:** Extended Response  (Question 46)

The Answer Sheet is part of the Examination Booklet. Take out the middle pages and remove the Answer Sheet by tearing along the perforation. You may use the blank sheet for rough work.

Write your candidate number, name and school name in the space given on the **Answer Sheet**.

For each question in **PART A** choose the best answer and write its **LETTER** in the space given on the Answer Sheet.

For each question in **PART B and C** work out the answer and write the answer in the space given on the **Answer Sheet**.

If you find a question very difficult, do not spend too much time thinking about it. Skip the question and go on with the rest of the paper. If you have time at the end, return to the difficult questions and think about them more carefully.

Write your answers in **BLUE** or **BLACK** ink (pen or biro).

If you decide to change an answer, make your correction as shown below so that it is clear to the markers what your final answer is. Do NOT use correction fluid on your answer sheet.

Hand in BOTH the Answer Sheet and the papers used for rough work at the end of the examination.

Extra time will not be allowed to complete the examination under any circumstances.

Penalty for cheating or assisting others to cheat in national examinations is non-certification.

**DO NOT TURN OVER THE PAGE AND DO NOT WRITE UNTIL YOU ARE TOLD TO START.**
PART A – MULTIPLE CHOICE

For each question in PART A (Questions 1 to 25), choose the best answer by writing the letter A or B or C or D in the space provided on the ANSWER SHEET.

For questions 1 to 3, refer to the passage below.

**No Continent is an Island**

There are an estimated one hundred and thirty thousand islands in the world. Many are small, not well known and with few or no inhabitants. Some are huge.

In the debate as to whether it is an island or a continent, Australia is often called the ‘island continent’. In simple terms, an island is a landmass (smaller than a continent) that is surrounded by water. As an island, Australia would be the biggest in the world. The argument supporting its status, as a continent is that geologically it sits on its own tectonic plate. As a continent, it would be ranked seventh out of seven. This would leave Greenland to wear the ‘island crown’, as it is geologically part of the North American plate.

The island of Greenland, governed from Denmark, is situated between the Arctic Ocean and the North Atlantic Ocean, northeast of Canada. Its total area is an impressive 2.1 million km$^2$. However, a huge interior plateau measuring approximately 1.7 million km$^2$ is permanently ice-covered. A mountainous, generally ice-free rim surrounds this plateau. The hardy Vikings settled on this rim- the carefully preserved ruins of their buildings date back a thousand years.

Greenland has about 55 000 inhabitants. Its population density is low – about 1 person per 33 km$^2$. By comparison, the land area of the main Japanese island of Honshu is only one tenth the area of Greenland, yet its population is more than 100 million. The population density is in the vicinity of 433 people per km$^2$. Its climate ranges from cool to sub-tropical.

For the inhabitants of Greenland, winters are harsh. Even the capital Nuuk, situated on the south west coast, has summer temperatures that are on average, a cool 11°C.

With an estimated population of 14000, the capital is also its largest town. Although early Inuit settlements date back thousands of years, it was in 1728 that Norwegian missionary Hans Egede founded this town, which he named Godthaab.

Some other island nations would dispute this, but Greenland tourist information claims their country to be the largest island in the world and their capital city to be the smallest.

*Source: key comp. Series p. 86*

**QUESTION 1**

Why is Greenland not considered a continent?

A. Not many people live there.  
B. It is an ice-covered landmass.  
C. It is not on its own tectonic plate.  
D. Its not surrounded by water.
QUESTION 2
Who were the original inhabitants of Greenland?
A. The Norwegians.  
B. The Inuit.  
C. The Danish.  
D. The Canadians.

QUESTION 3
Which part of Greenland has a higher population density?
A. The town area.  
B. The ice-free rims.  
C. The coastal areas.  
D. The interior plateau.

For Questions 4 and 5, refer to the diagram below.

A structural profile of the tropical forest.

A storey – not a continuous canopy. Emergents protrude above the general canopy of the forest.

B. storey – the trees form a more or less continuous canopy.

C. storey – another continuous canopy. By this time, most of the light has been intercepted.

D. storey – tall woody shrubs.

E. storey – plants like ferns. Plants sparse because only 1 percent of light left.

Key:

a: parasitic climbing plant, buttress root
b: woody liana
c: Epiphytic fern
d: Epiphytic flowering plant

QUESTION 4
According to the diagram, how many metres tall should a tree be for it to be considered an emergent?
A. 0 - 50  
B. 20 – 40  
C. 25 - 40  
D. 40 - 50

QUESTION 5
What is the name given to layer of branches and leaves that spread out at the top of shorter trees and undergrowth?
A. Canopy  
B. Forest floor  
C. Shrubs  
D. Woody liana
For Questions 6 to 9, refer to the map of Sting Island below.

QUESTION 6
What is the four-figure Grid Square for Harefield?
A. 2107   B. 2106   C. 0621   D. 0721

QUESTION 7
Using the scale on the map, what is the straight-line distance from Richmond to Robertson?
A. 6.5 km   B. 6.0 km   C. 5.5 km   D. 5.0 km

QUESTION 8
Why is there a lighthouse located at Danger Point?
A. It is to prevent ships getting wrecked.   B. It is a good location for a lighthouse.
C. It is the highest point on the island.    D. Many ships do not like to go there.
QUESTION 9
Which direction is Harefield from Jackson?
A. North-west  B. South-west  C. North-east  D. South-east

For Questions 10 to 12, refer to the timeline.

A History Of Conflict Timeline

AD
1850 Lakota allow the US government to build forts and roads, like the Oregon Trail, across their lands
1854 An argument over a dead cow leads to an attack by US cavalry led by Lieutenant J. Grattan on the Brule Lakota – Grattan and 30 soldiers are killed
1855 Massacre of Brule Lakota at Bluewater Creek by US cavalry
1860 First Pony Express and Overland Stage Coach cross Lakota lands
1861 Santee Lakota attack European settlers Telegraph lines cross Lakota land
1862 Union Pacific and Northern Pacific railroad lines cross the Great Plains Gold discovered in Montana
1864 Bozeman Trail to Montana opens Santee and Yanktonai Lakota forced onto reservations
1865 Oglata Lakota, led by Chief Red Cloud, attack Europeans
1866 Buffalo numbers declining. Red Cloud defeats US soldiers, forcing Bozeman Trail and US forts to close
1868 Red Cloud signs a peace treaty with the US government recognising Lakota rights to their lands. Chiefs Sitting Bull and Crazy Horse refuse to sign and live outside the reservation
1869 US troops attack the non-reservation Lakota in response to attacks on railways
1872 Lakota attacks on forts and settlers increase
1874 Expedition, led by General Custer, discovers gold in the Black Hills, a Lakota sacred site
1876 Battle of Little Big Horn, US soldiers sent to force Lakota onto reservations Lakota forced to give up the Black Hills
1883 The Sun Dance and other Lakota customs forbidden by US government
1890 Massacre at Wounded Knee ends all Lakota resistance

QUESTION 10
How many decades are mentioned in the “A History of Conflict” timeline?
A. 2  B. 3  C. 4  D. 5

QUESTION 11
What was the result of the event that took place in 1854?
A. There was an argument between the U.S. Army and the landowners.
B. The Lieutenant J. Grattan killed a cow.
C. Thirty soldiers were killed with their leader.
D. U.S. Calvary attacked the indigenous people.
QUESTION 12
Which point on the time-line represents the year in which the Sun Dance and other customs were outlawed?

A. III  B. IV  C. V  D. VI

For Questions 13 to 14, refer to the triangular graph.

QUESTION 13
What was the percentage of people employed in the primary sector in Brazil in 1960?
A. 65  B. 49  C. 34  D. 15

QUESTION 14
In 1980, what percentage of the workforce was employed in the secondary sector in Ethiopia?
A. 7  B. 13  C. 20  D. 80
For Questions 15 to 17, refer to the following information.

Results of human pressure on the environment

<table>
<thead>
<tr>
<th>Region</th>
<th>Rural population affected by severe desertification (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudano-Sahelian</td>
<td>27.6</td>
</tr>
<tr>
<td>Africa south of Sudano-Sahelian</td>
<td>25.0</td>
</tr>
<tr>
<td>Mediterranean Africa</td>
<td>8.5</td>
</tr>
<tr>
<td>Western Asia</td>
<td>16.0</td>
</tr>
<tr>
<td>South Asia</td>
<td>26.0</td>
</tr>
<tr>
<td>USSR in Asia</td>
<td>2.0</td>
</tr>
<tr>
<td>China &amp; Mongolia</td>
<td>6.5</td>
</tr>
<tr>
<td>Australia</td>
<td>0.03</td>
</tr>
<tr>
<td>Mediterranean Europe</td>
<td>6.0</td>
</tr>
<tr>
<td>North America</td>
<td>13.5</td>
</tr>
<tr>
<td>South America and Mexico</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Desertification threatens as much as one-third of the world’s land surface. More than 100 million people are already suffering the effects of severe desertification, many of them forced to leave their homes in search of a new livelihood. Africa alone has 10 million such ‘environmental refugees’. UNEP

Pressure on woods, pastures, streams, and arable land is causing deforestation, soil erosion, and the lowering of the water table. Tropical forests are shrinking by 11 million hectares a year; topsoil is being lost at the rate of 26 000 million tons a year; new deserts are appearing at a rate of six million hectares a year; in tropical developing countries 160 million hectares of uplands watershed have been grossly degraded over the past 30 years; in many areas groundwater is being consumed faster than it is being replenished; and salination or waterlogging affect half the world’s irrigated croplands.

QUESTION 15
According to the graph, how many regions in the world have more than 13.6 million of the rural population affected by severe desertification?
A. 2  B. 3  C. 4  D. 5

QUESTION 16
What percentage of the world’s land surface is threatened by desertification?
A. 10.3  B. 27.3  C. 30.3  D. 33.3

QUESTION 17
According to the passage, what is responsible for the depletion of forests?
A. Loss of upland watershed
B. Waterlogging of fertile farmlands
C. Force exerted on forest, grazing, rivers and fertile land
D. Pollution of underground water
For Questions 18 and 19, refer to the diagram below.

**QUESTION 18**
The diagram shows a landform feature formed in a desert landscape. What agent is directly responsible for the formation of this feature?
A. Wind  
B. Sun  
C. Water  
D. Ice

**QUESTION 19**
Which of these processes is responsible for the formation of this landform feature?
A. Corrosion  
B. Erosion  
C. Mass wasting  
D. Deposition

For Questions 20 to 21, refer to the graph below.

**QUESTION 20**
How many countries spent more on imports than they earned on exports?
A. 2  
B. 3  
C. 4  
D. 5

**QUESTION 21**
Which of these countries had a favourable trade balance to the nearest US$40 billion?
A. South Korea  
B. Russia  
C. Canada  
D. China
For Questions 22 to 24, refer to the graph below.

Population without access to safe water and sanitation

QUESTION 22
Which of these countries had approximately 50% of its population having access to clean water between 1990 and 1997?
A. Mongolia  B. Camaros  C. Nepal  D. Malawi

QUESTION 23
Approximately what percentage of Papua New Guinea’s population had access to safe water between 1990 and 1997?
A. 20  B. 30  C. 70  D. 80

QUESTION 24
Which of these countries had over 90% of their population having access to sanitation?
A. Malawi and Sierra Leone  B. Chad and Mali  
C. Malawi and Mali  D. Nepal and Eritrea
For question 25, refer to the map below.

**QUESTION 25**
In which quarter of the world is 15°N 29°E located?
PART B - SHORT ANSWERS

For each question in PART B (Question 26 to 45), work out the answer and write the answer in the space provided on the ANSWER SHEET.

For Questions 26 to 30, refer to the map and table below.

![Map of significant gold producers](image)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>679.6</td>
<td>638.0</td>
<td>604.9</td>
<td>605.4</td>
<td></td>
</tr>
<tr>
<td>USSR</td>
<td>267.0</td>
<td>275.0</td>
<td>277.0</td>
<td>260.0</td>
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<td>USA</td>
<td>62.6</td>
<td>118.0</td>
<td>154.0</td>
<td>295.0</td>
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<td>75.1</td>
<td>110.7</td>
<td>241.3</td>
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<td>Canada</td>
<td>73.5</td>
<td>104.6</td>
<td>116.5</td>
<td>165.0</td>
<td></td>
</tr>
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<td>Brazil</td>
<td>58.7</td>
<td>67.4</td>
<td>83.8</td>
<td>78.0</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>33.3</td>
<td>39.9</td>
<td>39.5</td>
<td>37.2</td>
<td></td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>18.4</td>
<td>36.1</td>
<td>33.9</td>
<td>33.6</td>
<td></td>
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<tr>
<td>Colombia</td>
<td>17.7</td>
<td>27.1</td>
<td>26.3</td>
<td>32.5</td>
<td></td>
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<tr>
<td>Chile</td>
<td>19.0</td>
<td>19.2</td>
<td>19.2</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>14.1</td>
<td>14.9</td>
<td>14.7</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>5.9</td>
<td>14.0</td>
<td>13.6</td>
<td>11.9</td>
<td></td>
</tr>
<tr>
<td>Zaire</td>
<td>9.0</td>
<td>8.0</td>
<td>12.0</td>
<td>12.0</td>
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</tr>
<tr>
<td>Ghana</td>
<td>11.8</td>
<td>11.5</td>
<td>11.7</td>
<td>17.3</td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>9.9</td>
<td>10.9</td>
<td>10.8</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>7.3</td>
<td>8.3</td>
<td>8.3</td>
<td>9.6</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: I significant gold producers (Bureau of Mineral Resources, Canberra)
QUESTION 26
Which country produced 6.6 tonnes of gold less than Papua New Guinea in 1983?

QUESTION 27
Name the country, which increased its production by 210.7 tonnes in 1990 than 1983.

QUESTION 28
Which country shows continuously declining production between 1983 and 1990?

QUESTION 29
Which continent has the most major gold producing nations?

QUESTION 30
What production capacity is Papua New Guinea in as a gold producer?

For Questions 31 to 33, refer to this illustration.

QUESTION 31
Which of these water related disease cause more deaths per year?

QUESTION 32
Which water related disease cause less deaths per year?

QUESTION 33
How many more deaths per year is malaria than schistosomiasis?
For Questions 34 and 35, refer to the graph below.

**QUESTION 34**
Which energy source was most consumed between the period 1950 to 2000?

**QUESTION 35**
Which energy resource had a lesser significance in USA between 1960 and 2000?

For Questions 36 and 37, refer to the picture below.

**QUESTION 36**
What feature of a river is shown in this picture?

**QUESTION 37**
What will the foreground feature of the river eventually become if erosion continues overtime?
For Questions 38 and 40, refer to the table below.

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Germany</th>
<th>Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population mid 2007</td>
<td>302.2 m</td>
<td>82.3 m</td>
<td>77.1 m</td>
</tr>
<tr>
<td>Population 2025 (projected)</td>
<td>349.4 m</td>
<td>79.6 m</td>
<td>108.7 m</td>
</tr>
<tr>
<td>Total fertility rate (lifetime births per woman)</td>
<td>2.1</td>
<td>1.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Population below age 15 (%)</td>
<td>20%</td>
<td>14%</td>
<td>43%</td>
</tr>
<tr>
<td>Population ages 65+ (%)</td>
<td>12%</td>
<td>19%</td>
<td>3%</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>78 years</td>
<td>79 years</td>
<td>49 years</td>
</tr>
<tr>
<td>Infant deaths per 1,000 births</td>
<td>6.5</td>
<td>3.8</td>
<td>77.0</td>
</tr>
<tr>
<td>Adults with HIV/AIDS (2005) (%)</td>
<td>0.6%</td>
<td>0.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Children under 5 underweight (%)</td>
<td>1%</td>
<td>-</td>
<td>35%</td>
</tr>
</tbody>
</table>

SOURCE: C. HAUB, 2007 World Population Data Sheet

**QUESTION 38**

How many years longer is an average American expected to live than an Ethiopian?

**QUESTION 39**

How many million Americans are expected to be below the age of 15 by the year 2025? *Round off to nearest whole number.*

**QUESTION 40**

In which country is the population growing at the *fastest* rate?

For Questions 41, refer to the diagram below.

**QUESTION 41**

What feature does the Roman numeral V indicate?
For Questions 42 to 45, refer to the vegetation profile below.

QUESTION 42
According to the vegetation profile, where would vegetation type I be found?

QUESTION 43
Name the type of vegetation that would have broad leaf trees that change with seasons.

QUESTION 44
Which Roman numeral on the vegetation profile would have forest with needle like leaves?

QUESTION 45
Which Roman numeral represents the vegetation type common to Papua New Guinea?
PART C – EXTENDED RESPONSE

For each question in PART C, work out the answer and write the answer in the space provided on the ANSWER SHEET.

For Question 46, refer to the map below.

I. Which city is located at 23°N 83°W?

II. What is the distance from Mexico City to Miami?

III. What is the latitude and longitude of Kingston, Jamaica?

IV. Name the country whose capital city is located at 10°N 84°W.

V. A plane takes off from Kingston, Jamaica. It flies 1,400 km to the southeast and then lands. Where does it land? (Give the name of the City and Country)

END OF EXAMINATION