INSTRUCTIONS TO CANDIDATES

To be read by the external invigilator to all candidates

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

The test is divided into three parts:

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

Write your candidate number, your name, school name and province name in the space provided on the Answer sheet.

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

For each question in PART B, work out the answer and write the answer in the space provided on the Answer Sheet.

PART C, has one question only, Question 46, and is worth 5 marks. All workings steps must be correctly answered for full marks.

If you find a question very difficult, do not spend too much time thinking about it. Leave 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.

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

DO NOT TURN OVER THE PAGE AND DO NOT WRITE UNTIL YOU ARE TOLD TO START.
PART A (Questions 1 to 25)

For each question, choose the best answer and write the letter A, B, C or D in the space next to the question number on the ANSWER SHEET.

QUESTION 1
Which of these is a percussion instrument?
A. guitar  
B. trombone  
C. kundu  
D. bull roarer

QUESTION 2
Refer to the parallel circuit to answer the question.
What will happen if all the switches; S1, S2, S3 and S4 were closed (switched on)?

A. Only L1 will light  
B. Only L2 will light  
C. Both L1 and L2 will light  
D. No lamps will light

QUESTION 3
Athletics involves track and field events. Which of the following given contains only field events?
A. Hammer throw, 200m relay, High jump discus.  
B. 1500m race, 100m relay, Javelin, Triple jump.  
C. High jump, Walking events, Hurdle event, Shot put.  
D. Shot put, Long jump, Discus, Javelin.

QUESTION 4
The students were asked to separate sugar and water from a sugar solution.
Which of the following is the correct process in separating the sugar solution?
A. Filtration  
B. Evaporation  
C. Condensation  
D. Decanting
Refer to the cartoon below to answer Question 5

![Cartoon Image]

**QUESTION 5**
The phrase “the earth rotates on its axis” means the earth moves

A. in a circle once a year.
B. around the sun every 365 days.
C. once every 24 hours on its imaginary line.
D. once every 28 days around the moon.

For Questions 6 and 7, refer to the pictures below.

**QUESTION 6**
Which two organisms are vertebrates?

A. P and S  
B. S and T  
C. Q and S  
D. R and T

**QUESTION 7**
Which organism moves around by using liquid (fluid) inside its body?

A. Q  
B. R  
C. S  
D. T
QUESTION 8
What is the volume of liquid in the measuring cylinder?

A. 6.2ml  B. 6.4ml
C. 6.6 ml  D. 6.8 ml

For Questions 9 and 10, refer to the passage below.

A woman’s body works on a monthly cycle, controlled by hormones, which takes about 28 days (3-5 weeks). This is regarded as normal. Her fertility changes throughout the month. If she does not become pregnant, the lining of uterus (womb) breaks and comes out. This is called menstruation. Monthly menstruation of a woman stops when she becomes pregnant. The cycle starts all over again after birth. It stops permanently when the woman reaches the age of 45-50 years. This change is called menopause.

QUESTION 9
The above passage explains why a woman has
A. menstruation.  B. hormones.  
C. a womb.  D. menopause.

QUESTION 10
What happens to a woman’s monthly cycle during menopause?
A. It stops for a year and then starts.  
B. It starts all over again. 
C. It stops completely. 
D. It’s final pregnancy for a mother.
Refer to the article below to answer Question 11 and 12.

The Chinese example

Many developing countries could learn a lot from China. They could learn about, for instance, organic farming, with its emphasis on recycling of farm wastes from inexpensive fertilizers; about biological controls to keep down pests and weeds; about China’s emphasis on human labour rather than costly machinery; about choosing crop varieties that suit local conditions; about soil conservation measures, such as terracing; about use of energy in forms other than fossil fuel, e.g. the methane gas produced by seven million bio-gas producers; about care for forest, which support agriculture through their watershed services and supply fuel (thus relieving pressure on valuable cattle dung); and about innovative aquaculture, enabling the Chinese to produce ten times more animal protein from one unit area of fish pond than the same unit of land given over to livestock.

QUESTION 11
This article is about
A. unsustainable practices.  
B. sustainable practices.  
C. rural farming in China.  
D. high spending on agricultural methods.

QUESTION 12
PNG is a developing country and could learn a lot from China. Which of these activities mentioned in the passage, has been commonly practised in PNG?
A. Innovative aquaculture.  
B. Organic farming.  
C. Biological control.  
D. Bio gas.

QUESTION 13
Refreshing and nutritious drinks can be made from the juice of fruits.
Which of the following is a nutritious drink?
A. coca cola  
B. lemon juice  
C. fanta  
D. sprite
Refer to the map below to answer Question 14 and 15.

QUESTION 14
Which farming activity is common in Australia?
A. Normadic herding  B. Livestock ranching
C. Subsistence shifting  D. Commercial mixed farming

QUESTION 15
Which of the following continents practice mainly nomadic herding?
A. North America & Asia  B. Australia & North America
C. Africa & North America  D. Africa & Asia

QUESTION 16
The purpose of preserving food is to prevent it from going bad. Food can be preserved in many ways: drying, pickling, chilling and salting.

Which of the following information below is NOT a reason for preserving food?
A. To be used later.  B. Add flavour to a meal.
C. Can be sold to generate income.  D. Consumed diet on the spot.
For Questions 17 and 18, refer to the food web below to answer the questions.

QUESTION 17
What is most likely to happen if all the grasshopper population died out?
A. Frog population will increase.
B. Snake population will increase.
C. Water beetle population will decrease.
D. Cattle egret will decrease.

QUESTION 18
Which alternative in the table matches organisms in the food chain with the correct consumer level?

<table>
<thead>
<tr>
<th>Producer</th>
<th>Herbivore</th>
<th>Carnivore</th>
<th>Top carnivore</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Grasshopper</td>
<td>Frog</td>
<td>Snake</td>
</tr>
<tr>
<td>B</td>
<td>Pond weed</td>
<td>Water beetle</td>
<td>Frog</td>
</tr>
<tr>
<td>C</td>
<td>Grass</td>
<td>Frog</td>
<td>Grass snake</td>
</tr>
<tr>
<td>D</td>
<td>Pond weed</td>
<td>Grasshopper</td>
<td>Water beetle</td>
</tr>
</tbody>
</table>
For Questions 19 and 20, refer to the map below.

QUESTION 19
The busiest air route is from London to _____________.

A. USA  
B. Japan  
C. Africa  
D. Australia

QUESTION 20
Which passage do ships have to go through from Europe, through the Middle East and to Asia?

A. Panama Canal  
B. Suez Canal  
C. North Atlantic Ocean  
D. South Atlantic Ocean
For Question 21, read the statement and answer the question.

Today in many countries, including Papua New Guinea, people are dying earlier than they should from diseases such as coronary heart disease, strokes, diabetes and high blood pressure. This is because people have changed their ways of living compared to many years ago.

QUESTION 21

According to the statement, the diseases mentioned are best described as __________ diseases.
A. ethnic
B. inherited
C. lifestyle
D. healthy

Study the table below carefully to answer Question 22 and 23.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kavieng</td>
<td>Mendi</td>
<td>Fly</td>
<td>Oro</td>
</tr>
<tr>
<td>Arawa</td>
<td>Wabag</td>
<td>Sepik</td>
<td>Enga</td>
</tr>
<tr>
<td>Lorengau</td>
<td>Mount Hagen</td>
<td>Markham</td>
<td>Morobe</td>
</tr>
<tr>
<td>Rabaul</td>
<td>Goroka</td>
<td>Ramu</td>
<td>Simbu</td>
</tr>
</tbody>
</table>

QUESTION 22

Which list contains only the names of rivers in Papua New Guinea?

QUESTION 23

Which list contains only the names of rivers in Papua New Guinea?

QUESTION 24

Plants and animal cells have only three common parts. Some other parts found in plant cells are not found in animal cells.

Which part below is found in a plant cell but not found in an animal cell?
A. cytoplasm
B. cell membrane
C. nucleus
D. chloroplast
QUESTION 25

Different codes of sports have different skills. The skills of throwing or striking have common elements. Which of the following is NOT a common element for the skills of throwing?

A. A transfer of height from the head to the knee
B. A follow-through action after the release
C. A transfer of weight from the back to the front
D. Bending knees in preparation to hit/throw to generate power.

PART B: SHORT ANSWER QUESTIONS (Questions 26 to 45)

For each question in PART B, work out the answer and write the answer in the space provided on the Answer Sheet.

For Question 26, refer to the information and diagram below.

The diagram shows an incomplete series circuit and four connecting wires. The wires P, Q, R, and S are all aluminium wires of the same length but different thickness.

![Series Circuit Diagram]

QUESTION 26

Which connecting wire, P, Q, R or S when connected between X and Y record the highest current?

QUESTION 27

The diagram shows the position of football players in a game of soccer.

![Football Positions Diagram]

What is the name given to the Group II?
For Questions 28 to 30, refer to the grid below.

![Map Grid]

**QUESTION 28**
What feature is found in D3?

**QUESTION 29**
Where is the banana plantation located?

**QUESTION 30**
Use the scale on the map to work out the distance from the school to the hospital.

---

For Questions 31 and 32, refer to the information below.

Mel used the key below to classify his different types of buttons.

![Classification Key]

**QUESTION 31**
What is group E made of?

**QUESTION 32**
In which group would you place these two buttons?
For question 33, refer to the information and diagram below.

Joan was asked to measure the length of an irregular object (rock). With the assistance of two match boxes and a ruler, Joan was able to measure the length as shown below.

![Diagram of match boxes and irregular object with measurements]

QUESTION 33
What is the length of the irregular object?

For Questions 34 and 35, refer to the public notice below.

**NATIONAL CAPITAL DISTRICT COMMISSION**

**PUBLIC NOTICE**

**NATIONAL CAPITAL DISTRICT LAND TAX & GARBAGE RATES**

This is to advise all the landowners in the National Capital District that NCDC Land Tax and Garbage Rates notices for 2010 have been mailed out. The tariff has been increased by 25% in 2010.

A 5% Discount will be granted if payments for 2010 land tax and garbage rates are made in full before 30th April 2010.

Payments must be made to the cashier at City Hall ground floor and must obtain an official receipt. Payments can also be made at any post office near you and via Bill Pay. The Bill pay codes and property reference numbers are printed in the respective rates notices.

Also be advised that payment of land tax and garbage rates is the responsibility of the current owner. In case if you do not receive the notice for 2010 Land Tax and Garbage Rates or for other enquiries, please contact our Revenue Section, located at City hall ground floor on telephone 323 1492, 3240765, 3240781, or Fax 325 3079.

Authorised by

Leslie Alu - City Manager

QUESTION 34
From the public notice above, name one of the payments the landowners are entitled to pay?

QUESTION 35
Who is indirectly generating income from its properties?
For Questions 36 to 38, refer to the information and diagram below.

The word zone is sometimes used instead of area. A map that shows these different zones is called a *land use map*. This map shows the main land use zones for a typical city.

Which zones of the city would have the following?

**QUESTION 36**
Residential Area _____

**QUESTION 37**
Factories _____

**QUESTION 38**
Shops and Offices _____

*For Questions 38 and 40, refer to the pie charts showing the share of World Manufacturing Trade in percentage (%) in 1973 and 1987.*

**QUESTION 39**
Which country or group of countries had the highest increase in the shares of world manufacturing trade?
QUESTION 40
Which country increased its manufacturing trade share by 3 percent?

QUESTION 41
By how many percentages did NICS increase their trade share?

For Questions 42 and 45, refer to the events and the timeline given.

1963 - First South Pacific Games held in Suva, Fiji.
1969 - Second South Pacific Games hosted by PNG in Port Moresby.
1974 - Third South Pacific Games in Tahiti.
1979 - Forth South Pacific Games in Fiji.
1983 - Fifth South Pacific Games in Apia, Samoa.
1987 - Sixth South Pacific Games held in New Caledonia.
1991 - Seventh South Pacific Games held in PNG.
1994 - Eighth South Pacific Games held in Cook Islands.

QUESTION 42
Which letter on the timeline shows the games being held for the second time in Fiji?

QUESTION 43
After how many decades did PNG host the games for the second time?

QUESTION 44
Which nation hosted the games at point C on the timeline?

QUESTION 45
From all the places above that have hosted the South Pacific Games, how many are MELANESIANS?
PART C EXTENDED RESPONSE

For Questions 46, refer to these column graphs.

a. Name one of the months with the highest rainfall in Sydney.

b. Which month receives the lowest amount of rainfall in Hobart?

c. What is the rainfall reading for the month of September in Sydney?

d. What is the rainfall reading for the month with the highest rainfall in Hobart?

e. Which city receives more rain than the other?

END OF EXAMINATION