



**NORMAN HENSILWOOD HIGH SCHOOL**  
**EXAMINATIONS**



<b>DATE</b>	<b>8 JUNE 2011</b>
<b>GRADE</b>	<b>9</b>
<b>SUBJECT AND PAPER</b>	<b>GEOGRAPHY PAPER 1</b>
<b>TIME</b>	<b>1 HOUR 30 MINUTES</b>
<b>MARKS</b>	<b>100</b>
<b>EXAMINER</b>	<b>J HOLLAND</b>
<b>MODERATORS</b>	<b>D MILLAR / P VARDAN</b>

D.  31.5.2011   
Moderated.

## Instructions to candidates :

- Answer all questions
- Number the answers exactly as the questions are numbered in this question paper
- Rule off on completion of each subsection
- Structure your answers properly. Where possible, illustrate your answers with labelled diagrams. **NB: Pencil only**
- Write in neatly and legibly.
- The use of a calculator and a protractor is permitted.
- Show all calculations in mapwork.
- Use only BLACK or BLUE ink to answer questions.
- Remember that you stop reading a question after the mark allocation ! Check the allocation per question and respond accordingly.

**GOOD LUCK !!**



### QUESTION 1 : MAPWORK

Use the 1 : 50 000 topographical map extract Barberton 2531 CC to answer the following questions .

1.1 Choose the correct answer for each of the following questions. Write ONLY the Answer eg. 1.1.. C

1.1.1 The map code to the EAST of 2531 CC is...

- A) 2531 CD
- B) 2531 CA
- C) 2530 AC
- D) 2530 CB

1.1.2 The area symbol in block E5 is a ...

- A) Orchards
- B) Main Road
- C) Dipping tank
- D) Cultivated land

1.1.3 The main economic activity in block H3 is ...

- A) Mining
- B) Coal factory
- C) Power plant
- D) Quarrying

1.1.4 The slope between A – B on the topographical map ...

- A) Concave
- B) Convex
- C) Steep
- D) Terrace

1.1.5 The farmer in block F4 farms with ...

- A) Orchards and vineyards
- B) Maize only
- C) Maize and Cattle only
- D) Sheep and goats

1.1.6 The location of the aerodrome (block D3) is a good one because it ...

- A) is near the Rifle Range
- B) it is away from the built up areas of the town
- C) has three runways
- D) it has a good view of the river

1.1.7 What evidence is there in F2 that irrigation is used to increase farm production?

- A) Dam
- B) Furrow
- C) River
- D) Pipe line

1.1.8 The word scale of a topographic map is ...

- A) 1cm represents 50 000m
- B) 1cm represents 500m
- C) 1cm represents 5000m
- D) 1cm represents 50m

8x1=[8]

### CALCULATIONS

1.2 Calculate the area of block J5 and J6 on the topographic map. Show all calculations.

3x1=(3)

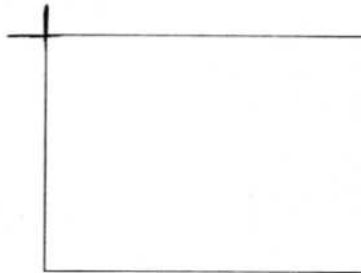
1.3 Give the coordinates for the following symbol in G5.

  
1204,2

2X1=(2)

1.4 Illustrate the map code of Barberton.

2x1=(2)

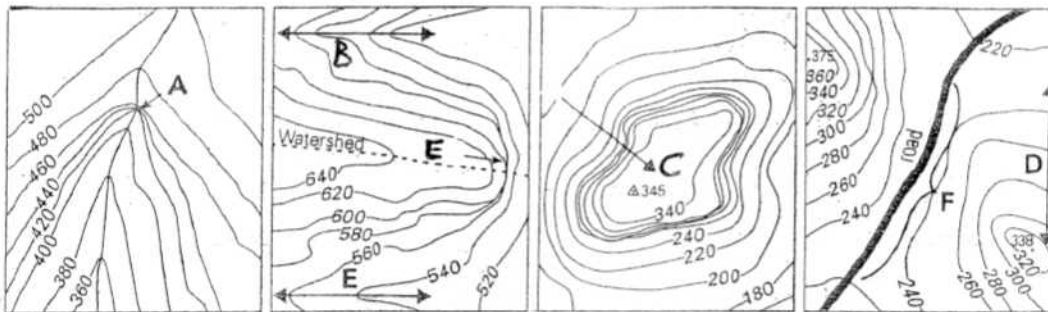


- 1.5 A light aircraft leaves the aerodrome in block D4 and takes off in a north-westerly direction.
- What is the take-off bearing (in degrees)? (1)
  - What distance (in metres) may he travel along the runway before he takes off? Show your calculation. 3x1=(3)

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### MAP READING AND ANALYSIS

- 1.6 What evidence is there on the map that Barberton started as a mining town? (2)
- 1.7 Name any TWO recreational facilities available to the residents of the mapped area. 2x1= (2)
- 1.8 Environmental conservation is practised. Give evidence from the map. 1x2=(2)
- 1.9 Barberton is a Central Place. It serves the surrounding community. What evidence is there on the map to support this statement? 2x1=(2)
- 1.10 Identify the landforms A to C in the diagram below. 3x1=(3)



1.11 Aerial Photographs and GIS

a. Identify the type of oblique aerial photos below:

A.



B.



2x1=(2)

b. Explain the difference between the two oblique aerial photos above.

2x1=(2)

1.12 a. Define the concept Geographic Information System.

1x2=(2)

b. Name the components that make up a GIS system.

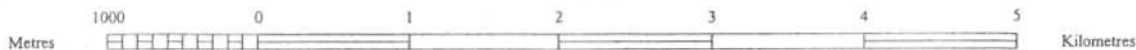
3x1=(3)

c. What does the system produce?

(1)

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**Total : 40**



CONTOUR INTERVAL 20 METRES

REFERENCE

National Freeway; National Route.....		International Boundary and Beacon.....		Fence; Wall.....	
Arterial Route.....		Provincial Boundary.....		Windpump; Monument.....	
Main Road.....		Game, Nature Reserve & State Forest Boundary.....		Communication Tower.....	
Secondary Road; Bench Mark.....		Perennial River.....		Mine Dump; Excavation.....	
Other Road; Bridge.....		Perennial Water.....		Trigonometrical Station; Marine Beacon.....	
Track and Hiking Trail.....		Non-perennial River.....		Lighthouse and Marine Light.....	
Railway; Station or Siding.....		Non-Perennial Water.....		Cemetery; Grave.....	
Other Railway; Tunnel.....		Dry Water Course.....		Erosion; Sand.....	
Embankment; Cutting.....		Dry Pan.....		Woodland.....	
Power Line.....		Marsh and Vlei.....		Cultivated Land.....	
Built-up Area.....		Pipeline (above ground).....		Orchard or Vineyard.....	
Buildings; Ruin.....		Water Tower; Reservoir; Water Point.....		Recreation Ground.....	
Post Office; Police Station; Store.....		Coastal Rocks.....		Row of Trees.....	
Place of Worship; School; Hotel.....		Prominent Rock Outcrop.....		Original Farms.....	

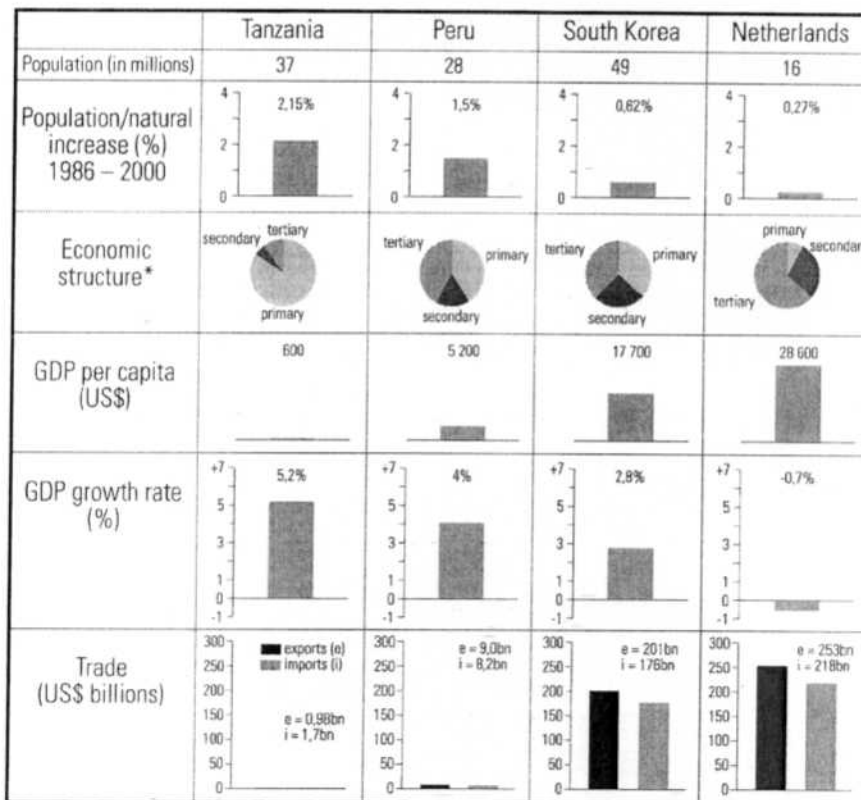
## QUESTION 2

2.1 Determine whether the following statements are TRUE or FALSE. Write down the answer only eg. 2.1.7 True.

- 2.1.1 Development means economic growth, technological advancement and looking after peoples human rights.
- 2.1.2 Literacy is the percentage of people who cannot read and write.
- 2.1.3 CFC's are chemicals released from fridges, aerosols, etc. that destroy ozone in the atmosphere.
- 2.1.4 Environmental impact studies investigate the impact of new developments on the environment.
- 2.1.5 Conservation is the love for the environment.
- 2.1.6 Biodegradable is when living organisms can be repaired and be reused in the environment.

6x1=(6)

2.2 Study the figure below, which shows levels and indicators of development for four specific countries, and then answer the questions below.



- 2.1.1 On which continent would each of these countries be found? 4x1=(4)
- 2.1.2 Which country has the largest population? (1)
- 2.1.3 Which country experienced the greatest increase in its population between 1986 and 2000? (1)

- 2.1.4 Which country has the smallest secondary and largest tertiary sector? 2x1=(2)
- 2.1.5 Which country has the richest citizens? Give a reason. 2x1=(2)
- 2.1.6 What do you understand by the term GDP per capita ? 2x1=(2)
- 2.1.7 Rank the four countries from least developed to most developed. 4x1=(4)
- 2.1.8 Describe the link between wealth and life expectancy. 2x1=(2)

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2.3 Coal is not a sustainable resource. Reliance upon it will not ensure our energy security.

- a. Explain the term 'Sustainable Development'. 2x2=(4)
- b. To preserve resources for future generations is to find ways to use renewable resources to make things we need. Suggest solutions. 2x1=(2)

[6]

**TOTAL:30**

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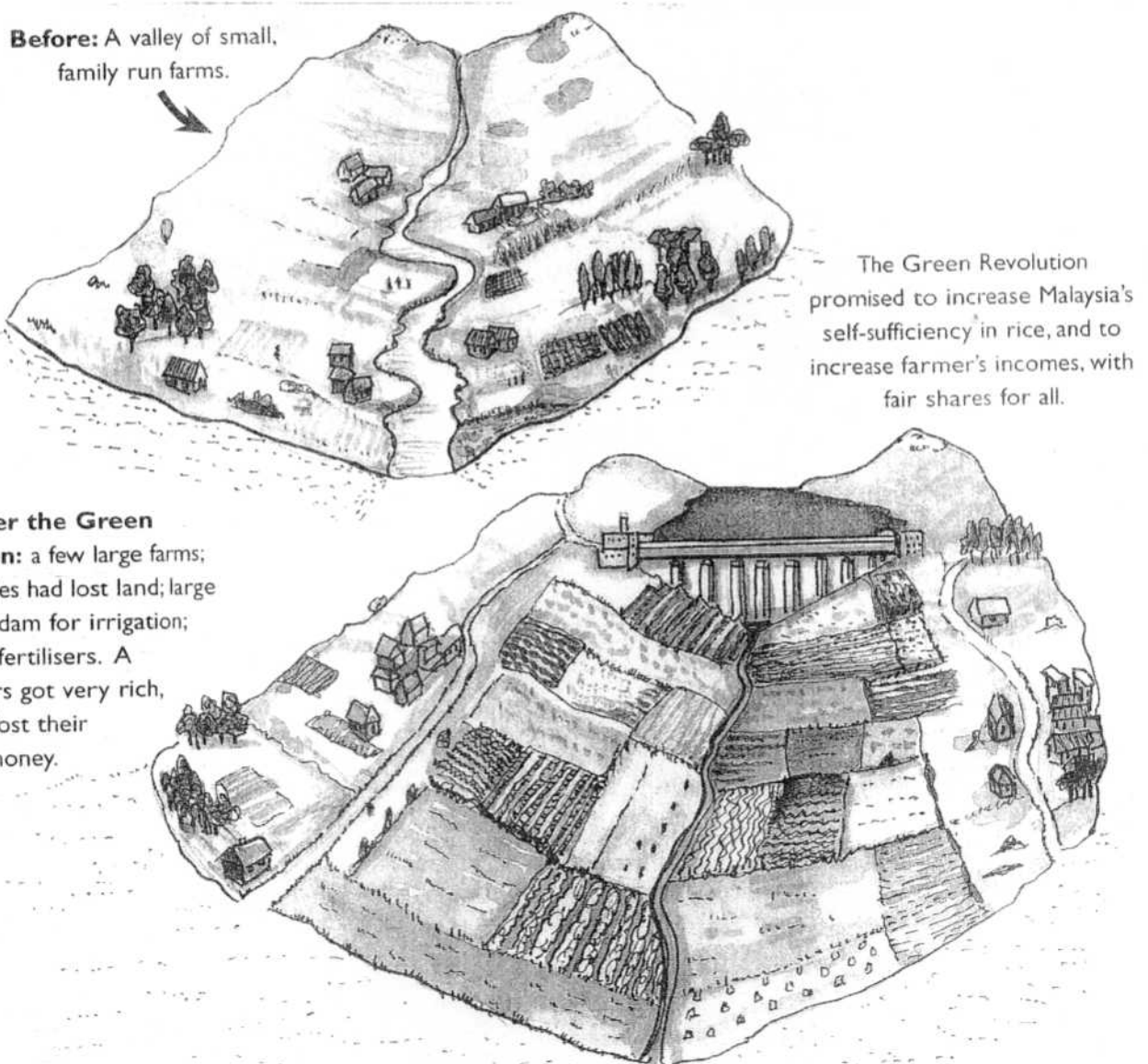
### QUESTION 3

**3.1 Give ONE word/term for each of the following definitions:**

- 3.1.1 To have enough food to feed a country's population.
- 3.1.2 Changing the genetic make-up of an organism to create a new organism.
- 3.1.3 A long period of time without rain or less rain than normal.
- 3.1.4 Technology that is affordable, can be maintained, replaced and used without damaging the environment.
- 3.1.5 Large scale removal of trees and vegetation.
- 3.1.6 Methods, systems and devices that are the result of scientific knowledge.

6x1=(6)

**3.2 Study the information on the Green Revolution and look carefully at the figure and then answer the questions below:**



- 3.2.1 Explain [in your own words] what is meant by the 'green revolution'. 1x2=(2)
- 3.2.2 In 1968, the term 'Green Revolution' was first used to describe the improvements in the food situation. Name the two developing countries where it was used first. 2x1=(2)
- 3.2.3 Discuss the reasons why the Green Revolution started in the 1940's to 1960's, especially in developing countries. 2x1=(2)
- 3.2.4 It was the developing countries which felt the negative effects of the 'Green Revolution'. Discuss any FOUR of these problems experienced by the developing farmers. 4x1=(4)
- 3.2.5 Name the country where the Green revolution started. (1)
- 3.2.6 Who is known as the 'father' of the Green Revolution and give a brief description of him? 2x2=(4)
- 3.2.7 List THREE benefits of the Green Revolution to the people living in the village of Muda. 3x1=(3)

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- 3.3 Study the cartoon which shows a negative view of Genetically Modified crops. Write a short essay in no more than 10 lines, which you either agree or disagree with the cartoon.



4x2=(8)

TOTAL:30  
FINAL TOTAL: 100