

**KZN DEPARTMENT OF EDUCATION
GREENBURY SECONDARY SCHOOL
FINAL EXAMINATIONS – 2015
GEOGRAPHY PAPER 1 – GRADE 10**

EXAMINER : R. RANGANATHAN **MARKS** : 225
MODERATOR : F. PARUK **DURATION** : 3HRS
DATE : 09/11/15

NAME OF LEARNER : _____ **GR/DIV** : _____

INSTRUCTIONS AND INFORMATION

1. This paper consists of 4 Questions.
2. Answer any 3 questions of 75 Marks each.
3. All diagrams are included in the ANNEXURE.
4. Leave a line between sub sections of questions.
5. Start each question at the top of a new page.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Write neatly and legibly.
8. This paper consists of 11 pages and an ANNEXURE of 10 pages.

SECTION A – The Atmosphere and Geomorphology

You must answer at least one question from this section.

QUESTION 1

1.1 Study the Source 1.1 which illustrates layers of the earth. Give one term that best describes each of the descriptions below. Write only the term next to the number in the answer book.

- 1.1.1 The outer layer of the earth that is solid and rigid.
- 1.1.2 The layer that is generally referred to as being soft and pliable.
- 1.1.3 Liquid layer consisting of iron and nickel.
- 1.1.4 Solid layer that is dense consisting of iron and nickel.
- 1.1.5 Layer that is composed of low-density material called peridotite.
- 1.1.6 The layer that is largely made up of granite and basalt.
- 1.1.7 The layer that is divided into sial and sima.

[7X1=7]

1.2 Study Source 1.2 on heating of atmosphere and answer the following questions.

1.2.1 Give one term that best describes each of the descriptions below.

- a) Energy given off by the sun. [1]
- b) Energy given off by the earth [1]
- c) The ratio of heat reflected by the different surfaces on the earth. [1]

1.2.2 Some of the heat energy given off by the sun is lost before it reaches the earth's surface. Identify the THREE ways in which it occurs by naming X, Y and Z. [3X1=3]

1.2.3 Name one gas that increases the temperature of the atmosphere. [1]

1.2.4 Which gas makes up approximately 21% of the atmosphere? [1]

[8]

1.3 Refer to the synoptic weather map in Source 1.3.

1.3.1 Indicate whether this is a summer or winter map.

Provide TWO reasons for your answer.

[1+2X2=5]

1.3.2 Name the fronts labelled x and y.

[4]

1.3.3 State the isobaric interval of the map.

[2]

1.3.4 Refer to weather station labelled B.

a) Describe the cloud cover.

[2]

b) State the wind direction.

[2]

c) State the wind speed.

[2]

[17]

1.4 Study the cloud in Source 1.4.

1.4.1 Identify the cloud type.

[2]

1.4.2 Give one characteristic of the cloud you identified (answer 1.4.1).

[2]

1.4.3 Briefly explain how this cloud is formed.

[4]

1.4.4 Describe the weather conditions associated with this type of cloud. (2 answers)

(2X2=[4])

[12]

1.5 Refer to Source 1.5 and answer the following questions.

1.5.1 Name the theory illustrated in figure 1.5.

[2]

1.5.2 Who was the scientist that proposed this theory?

[2]

1.5.3 What was the name of the supercontinent that existed approximately 200 million years ago?

[1]

1.5.4 What do the men in the cartoon think about the theory in question?

[2]

1.5.5 Provide evidence in support of this theory. (2 answers)

[2x3=6]

[13]

1.6 Refer to Source 1.6 – information on volcanoes.

1.6.1 Explain your understanding of the term VOLCANO.

[2]

1.6.2 Give a geological term for the phrase 'OLD Pelee was dead'.

[2]

1.6.3 State TWO characteristics of Mount Pelee that suggests that it is a composite volcano. [2X2=4]

1.6.4 What, according to the source were the negative impacts of this volcanic eruption? (2 answers) [2X2=4]

1.6.5 Volcanic activity can also have positive effects. Suggest TWO ways in which volcanic activity can be of value to a country's economy. [2X3=6]

[18]

[75 MARKS]

QUESTION 2

2.1 Give the word / term for each of the descriptions from the list below.

IGNEOUS ROCK, SEDIMENTARY ROCK, METAMORPHIC ROCK,
FAULTING, FOLDING, WARPING, ROCK-CYCLE

2.1.1 Rocks that form in layers

2.1.2 Used in the making of tombstones.

2.1.3 Contains precious stones such as diamonds.

2.1.4 The bending of the earth's crust into anticlines and synclines.

2.1.5 Slight bending of the earth's crust.

2.1.6 The breaking of the earth's crust.

2.1.7 The breakdown and recreation of rocks.

[7x1=7]

2.2 Refer to Source 2.2 showing layers of the atmosphere.

2.2.1 Provide labels for A, B and C. [3X1=3]

2.2.2 How many layers are there in the atmosphere? [1]

2.2.3 What is the approximate height of layer A? [1]

2.2.4 In which layer is the ozone formed? [1]

P.T.O... Pg 5... 2.2.5

- 2.2.5 Name one permanent gas found in layer A. [1]
- 2.2.6 Which layer is responsible for all weather phenomena? [1]
- [8]

2.3 Refer to Source 2.3 – article on global warming.

- 2.3.1 Explain your understanding of the term global warming. [2]
- 2.3.2 Why are cattle considered to be a greater contributor to global warming than motor vehicles? [2]
- 2.3.3 Suggest 3 reasons why cattle are seen as the biggest threat to the planet. [3X2=6]
- 2.3.4 Write a paragraph on sustainable ways in which global warming can be reduced. [4X2=8]
- [18]

2.4 Figure 24A shows the way in which the sun's rays reach the earth's surface.

Figure 24B shows the location of Durban and Port Nolloth. Study the both figures and answer the following questions.

- 2.4.1 In Figure 24A, is the temperature likely to be higher at x or y?
Give 2 reasons for your answer. 2+2X2=6]
- 2.4.2 State the factor responsible for variation in temperature depicted in this figure (24A). [2]
- 2.4.3 Although Durban and Fort Nolloth lie on the same line of latitude, Durban experiences higher temperature throughout the year.
Explain why this is the case. [2X2=4]
- [12]

2.5 Read the newspaper article in Source 2.5 and answer the following questions.

- 2.5.1 Define the term earthquake. [2]
- 2.5.2 Name the instrument used to record earthquakes. [2]
- 2.5.3 What is the term used for the graphic representation of an earthquake on paper? [2]
- 2.5.4 State one consequence of an earthquake with a magnitude of 7.9. [2]
- 2.5.5 What type of boundary forms when two plates of the earth's crust grind against each other? [2]
- 2.5.6 Provide 2 reasons why scientists predict that an earthquake will

P.T.O... Pg 6... most likely

most likely occur in South Africa, specifically in Durban, in the near future. [2X2=4]

2.5.7 Why should South Africans be concerned about the possibility of such an earthquake in Durban? (2 answers) [2X2=4]
[18]

2.6 Refer to Source 2.6 – intrusive volcanic features.

2.6.1 Explain the term 'Intrusive volcanism'. [2]

2.6.2 Identify the intrusive features labelled A and B. [2X2=4]

2.6.3 State one difference with regards to shape between features B and C. [2]

2.6.4 Describe the difference in the formation of a sill and a dyke. [2X2=4]
[12]

[75 MARKS]

SECTION B – Population and Water Resources

You must answer at least ONE question from this section.

QUESTION 3

3.1 Match Column A with Column B. Write down only the correct alphabet from Column B next to the number.

COLUMN A	COLUMN B
3.1.1 The spread of a country's population.	a) Famine
3.1.2 No. of people that live per square kilometre.	b) Literacy rate
3.1.3 The average number of years a person lives.	c) Infant mortality rate
3.1.4 A person leaving his country to seek safety.	d) Life expectancy
3.1.5 Serious shortage of food resulting in death.	e) Population distribution
3.1.6 Percentage of population that can read and write.	f) Refugee
3.1.7 The number of deaths per 1000 infants.	g) Population density
3.1.8 Imbalance between population and resources.	h) Fertility rate
	i) Death rate
	j) Overpopulation

[8X1=8]

P.T.O. Pg 7... 3.2 Refer

3.2 Refer to Source 3.2 which illustrates the Hydrological cycle.

Replace the letters A – G in the statements below with the correct geographical terms. Write down the term next to the letter.

- 3.2.1 A – largest reservoir of water on earth.
- 3.2.2 B – process whereby water changes to water vapour.
- 3.2.3 C – process whereby water vapour changes to water.
- 3.2.4 D – Any form of moisture released from atmosphere onto earth's surface.
- 3.2.5 E – water that flows on the earth's surface after rainfall.
- 3.2.6 F – moisture released from plants into the atmosphere.
- 3.2.7 G – process whereby water seeps into the ground.

[7X1=7]

3.3 Refer to Source 3.3 that shows the population characteristics of Brazil.

- 3.3.1 Is Brazil a MEDC or a LEDC? [2]
 - 3.3.2 Give a reason for your answer. [2]
 - 3.3.3 Suggest TWO possible reasons for the high birth rate in Brazil. [2X2=4]
 - 3.3.4 What are the negative impacts of a rapid population growth rate in Brazil? (2 answers) [2X2=4]
 - 3.3.5 If you were part of the Brazilian government, what measures would you put in place in order to curb the rapid population growth? (2 answers) [2X2=4]
- [16]

3.4 Refer to the Source 3.4 and answer the following questions.

- 3.4.1 Identify the type of migration depicted. [2]
- 3.4.2 List 2 pull factors (factors that attract people to the city). [2X2=4]
- 3.4.3 Discuss 2 consequences on the rural area as the result of this type of migration. [2X2=4]
- 3.4.4 What can be done by local authorities to reduce this type of movement? (2 answers) [2X2=4]

[14]

P.T.O Pg 8... 3.5 Refer

3.5 Refer to Source 3.5.

- 3.5.1 What is the main message portrayed in the cartoon? [2]
- 3.5.2 Discuss the significances of oceans under the following headings :
- a) Ocean as a source of oxygen. [2X2=4]
- b) Ocean as a source of food protein. [2X2=4]
- 3.5.3 Name the 2 ocean currents that influence the climate of South Africa. [2]
- 3.5.4 Explain what you understand by exploitation of oceans by man. [2]
- 3.5.5 List 2 ways (according to Source 3.5) in which the ocean is being polluted. [2X1=2]
- 3.5.6 Discuss 2 negative impacts of pollution on the ocean. [2X2=4]
- [20]

3.6 Read the newspaper article in Source 3.6 and answer the following questions.

- 3.6.1 What does exploitation of fish stocks mean? [2]
- 3.6.2 Discuss the effects that depletion of fish stocks will have on man. (2 answers) [2x2=4]
- 3.6.3 Suggest TWO ways in which the fishing industry can be regulated so that it remains sustainable. [2x2=4]

[10]

[75 MARKS]

QUESTION 4

4.1 Refer to the two population pyramids in Source 4.1 that represent 2 different countries. Indicate which pyramid, A or B is referred to in each of the descriptions below.

- 4.1.1 A triangular population pyramid.
- 4.1.2 A country showing a slow population growth.
- 4.1.3 A country with high life expectancy.
- 4.1.4 A country with high birth rate and high death rates.
- 4.1.5 A country with a large number of adults.
- 4.1.6 A country with a large number of young people.
- 4.1.7 A country with high life expectancy for females older than 80 years.

[7X1=7]

4.2 Study the flood hydrograph Source 4.2 and answer the following questions.

- 4.2.1 State the peak rainfall recorded. [1]
- 4.2.2 State the peak discharge recorded. [1]
- 4.2.3 What is the term used to describe the time difference between peak rainfall and peak discharge? [1]

Choose the correct answer within brackets.

- 4.2.4 The peak discharge occurred at approx. (00:50 / 01:50). [1]
- 4.2.5 X refers to the (rising limb / base flow). [1]
- 4.2.6 Y refers to the (falling limb / infiltration rate). [1]
- 4.2.7 The stream resumed its normal flow at (midday / midnight) on day (one / two). [2]

[8]

4.3 Refer to Source 4.3 – information on HIV / Aids in South Africa.

- 4.3.1 Define the term death rate. [2]
- 4.3.2 .
 - 4.3.2.1 State the trend of the child mortality rate between 2000 and 2010. [2]
 - 4.3.2.2 Suggest one possible reason for your answer (the trend you stated in 4.3.2.1). [2]

4.3.3 Provide TWO reasons for the high incidences of HIV / Aids in South Africa. [2X2=4]

4.3.4 If you were the Minister of Health in South Africa, suggest TWO measures that you would put in place to reduce the incidences of HIV / Aids in the country. [2X2=4]

[14]

4.4 Refer to Source 4.4 – Case Study and answer the following questions.

4.4.1 Explain the meaning of the following terms :

a) Political migrants [2]

b) Exile [2]

4.4.2 Why did many South Africans go into exile after the banning of the ANC? [2]

4.4.3 What were the penalties(punishment) faced for belonging to a banned organisation like the ANC? [2X2=4]

4.4.4 Name the public holiday to commemorate the Soweto Uprising of 1976. [2]

4.4.5 What problems does the article suggest are faced by returning exiles? [2]

4.4.6 Why do you think it would have been difficult for ordinary soldiers of UMKHONTO we Sizwe to adjust to life in the new South Africa? [2]

[16]

4.5 Read the newspaper extract on flooding Source 4.5 and answer the questions Set.

4.5.1 What weather phenomenon caused the flooding in Limpopo? [2]

4.5.2 Provide a geographical term for roads, dams, water and electrical supply. [2]

4.5.3 According to the article, what were the effects of the Limpopo floods. (2 answers) [2X2=4]

4.5.4 Discuss the effects of flooding under the following headings :

a) Higher food prices [2X2=4]

b) The spread of cholera (a water borne disease). [2X2=4]

[16]

4.6 Source 4.6 shows a summary of the demand for water in different sectors in 1996 as well as the estimated demand for 2030.

4.6.1 Name the sector that uses the largest volume of water. [2]

4.6.2 Suggest TWO reasons why the sector mentioned in 4.6.1 has such a high demand for water. [2X2=4]

4.6.3 Although mining and industrial sector has the lowest demand for water, it is the highest contributor to the GDP. Provide TWO reasons why you think that this sector makes such a great contribution to the GDP. [2X2=4]

4.6.4 Discuss two water management initiatives that the government can use to secure South Africa's scarce water supply in the future. [2X2=4]
[14]

[75 MARKS]

GRAND TOTAL : [225]

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24/10/18

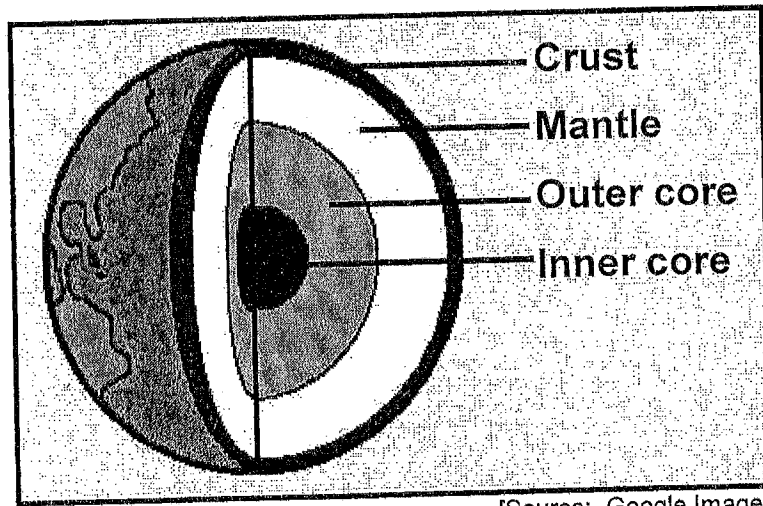
GEOGRAPHY

PAPER 1

GRADE 10

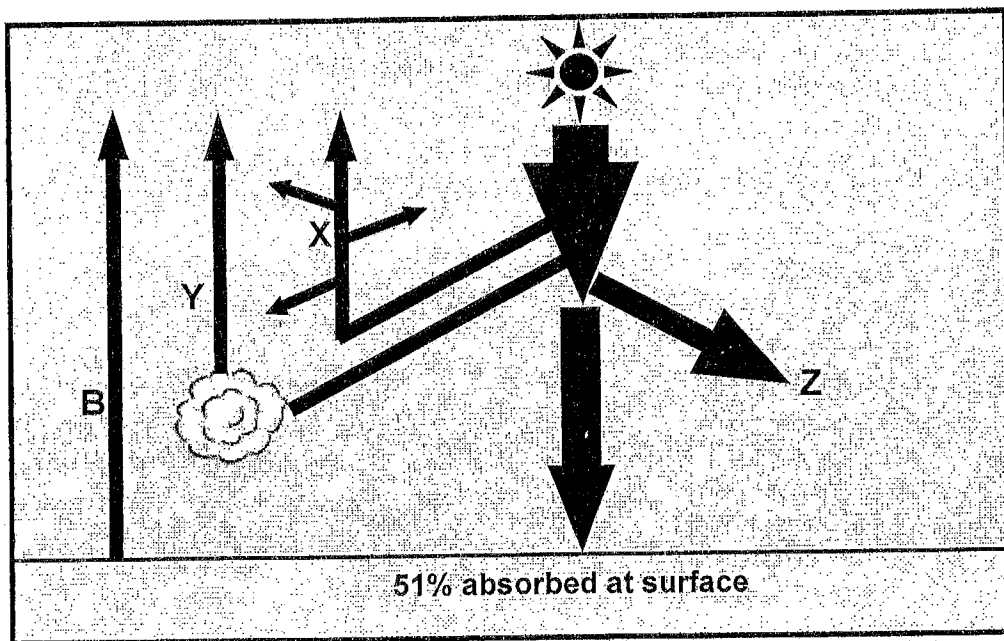
ANNEXURE

SOURCE 1.1



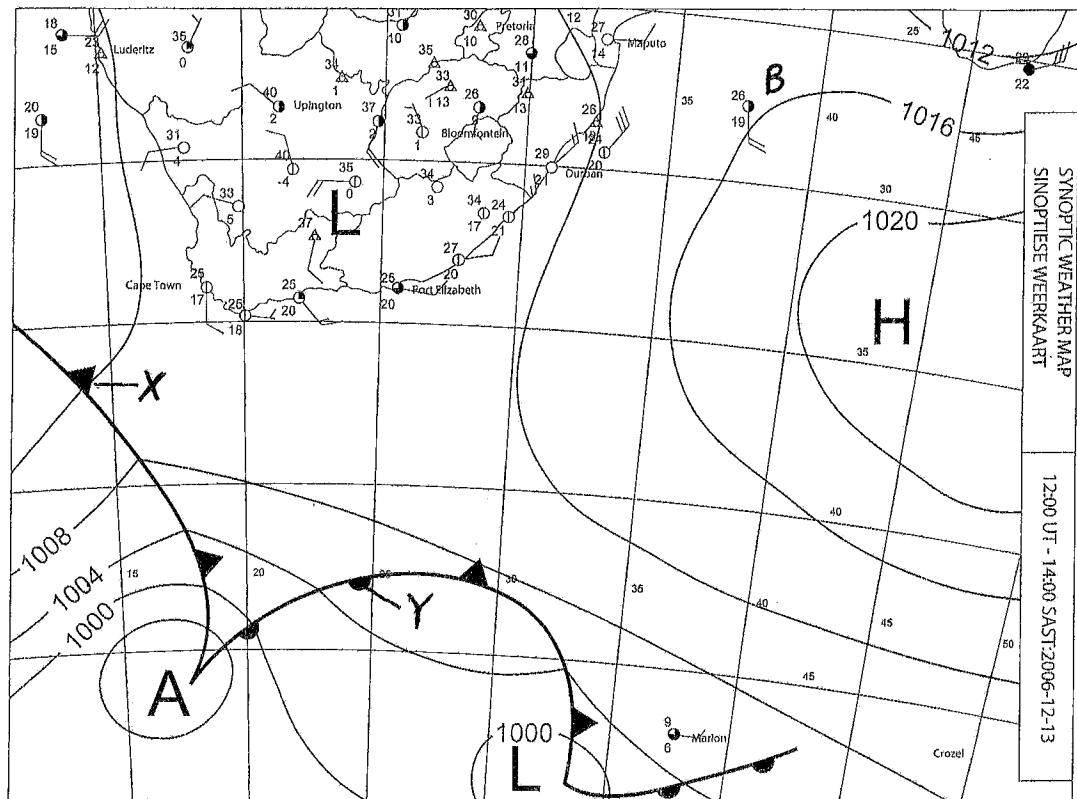
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SOURCE 1.2

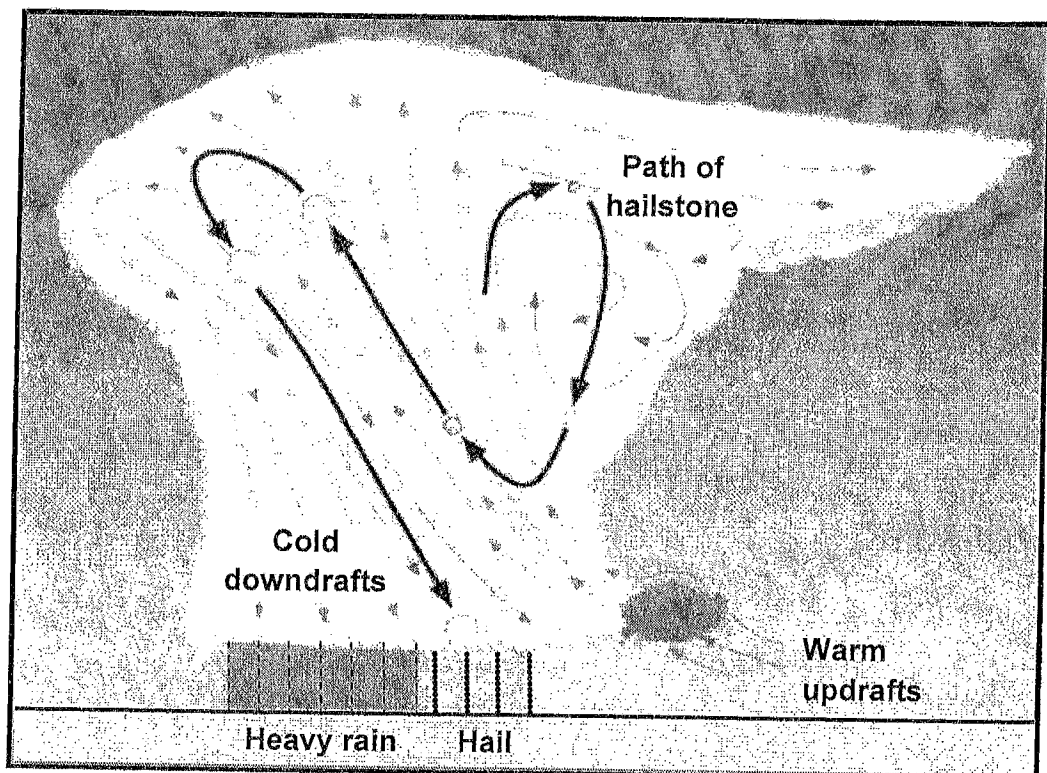


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Source 1.3

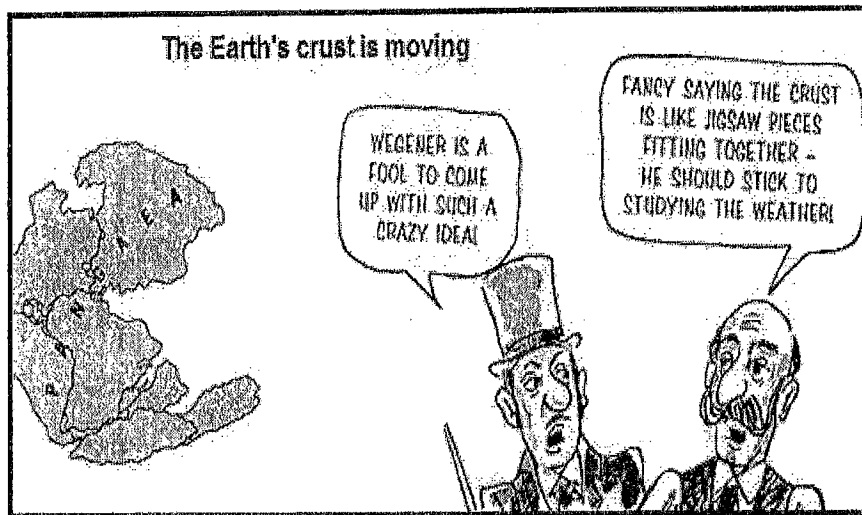


SOURCE 1.4



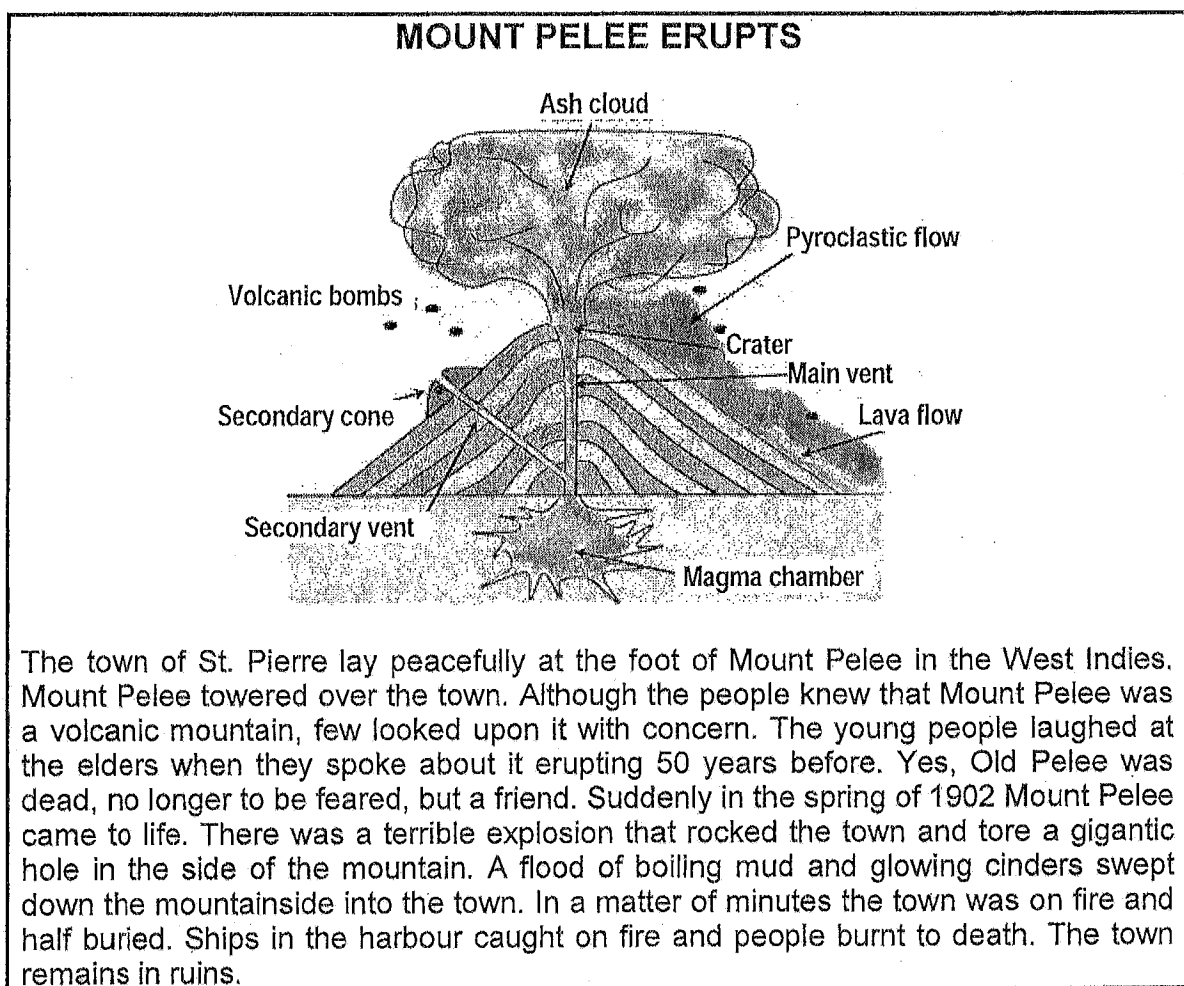
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SOURCE 1.5



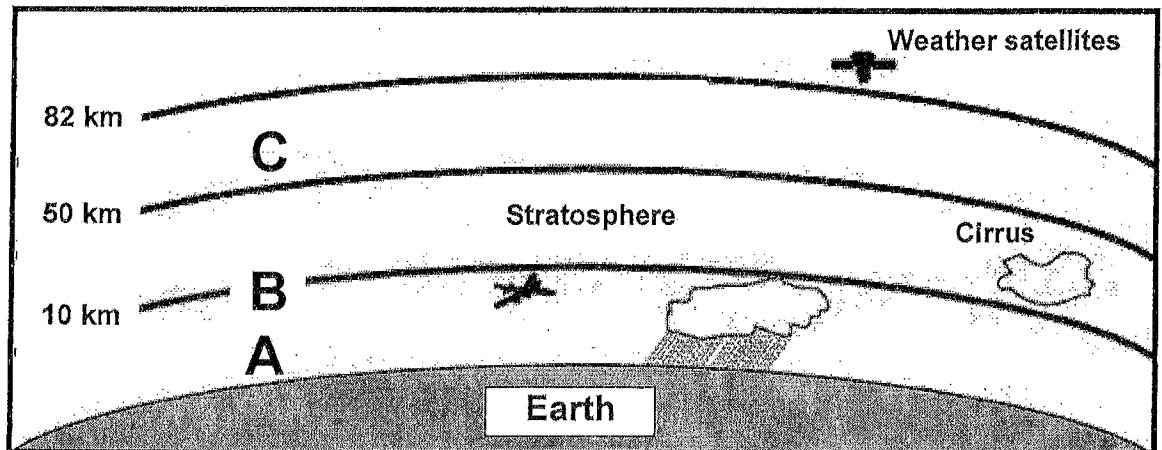
[Source: Google]

SOURCE 1.6



[Source: Google]

SOURCE 2.2



[Source: Google Image]

SOURCE 2.3

BEEF CATTLE CAUSE MORE EMISSIONS THAN CARS – REPORT

by Ben Kage

Rising petrol prices and global warming issues have spurred an interest in clean cars, but a report by the United Nations suggests that the real culprit is not the car, but the cow. The world's surging cattle herds are the greatest threat to the planet.

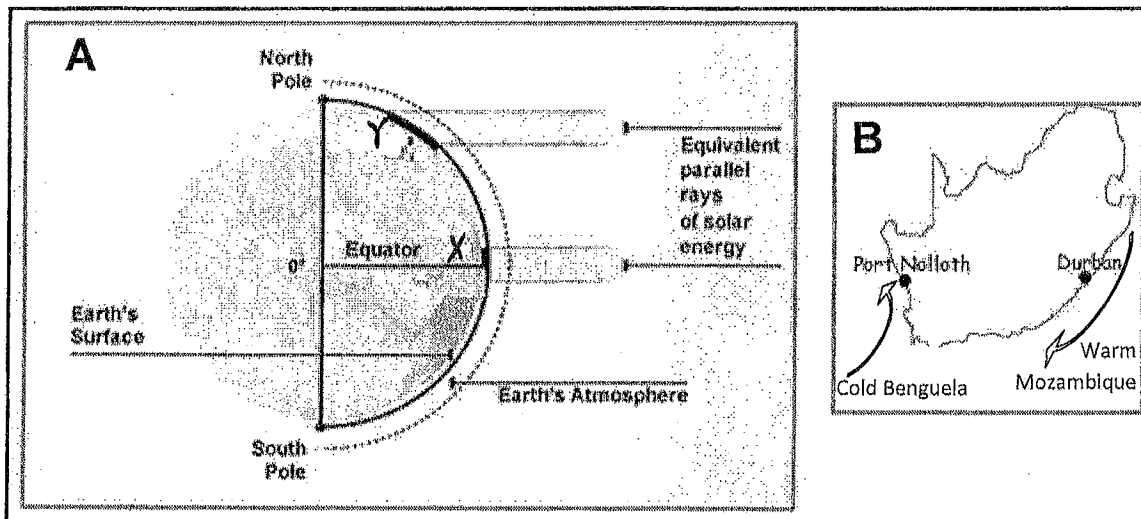
'Cattle farming not only destroys rainforests, uses enormous quantities of fresh water and results in the inhumane treatment of animals, it also increases the destruction of the planet's atmosphere,' Adams said.

The clearing of vegetation for grazing, the use of fertilisers for feed, and transportation of the product is responsible for 9 percent of all carbon dioxide emissions. While carbon dioxide is the most common greenhouse gas, the gasses released from cattle herds and manure emit more than one-third of all methane, a greenhouse gas that warms the world 20 times faster than carbon dioxide. Livestock also produce ammonia, a primary cause of acid rain. Cattle emit 18 percent of the greenhouse gases that cause global warming, which beats the emissions from all transportation combined.

It is also a major cause of deforestation, the report states, as a fifth of the world's pastures are being turned into deserts by overgrazing. Cows also require a massive amount of water – it takes about 9 900 litre of water to produce a little less than one litre of milk.

[Source: Google]

SOURCE 2.4



[Source: Google Image]

SOURCE 2.5

EARTHQUAKE IN SA A MATTER OF TIME

Pouza van der Fort

A major earthquake in South Africa is a real possibility but there is no way of predicting when it might occur. Durban has been singled out as the area of greatest concern in the event of an earthquake on the continent.

A major fault line starts underground at Port Shepstone and runs north through KwaZulu-Natal.

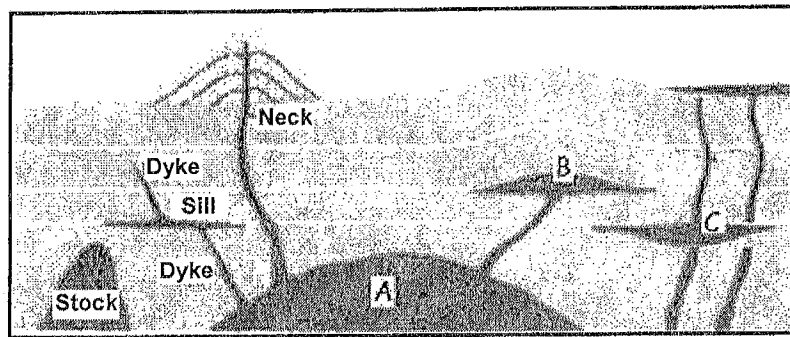
Dr Hartnady from Umvoto Africa, a company that specialises in earth science research and consultancy, said that earthquakes occur when the tectonic plates of the Earth's crust move, slide, shear and grind against each other.

The intervals between major earthquakes of magnitudes greater than seven ranged between 500 and 1 000 years, he said. In some parts of the East Africa rift system, the last major quake might have occurred 1 000 years ago. The next time might be due anytime soon.

'It is not a question of if, but when and it could even be tomorrow,' said Hartnady.

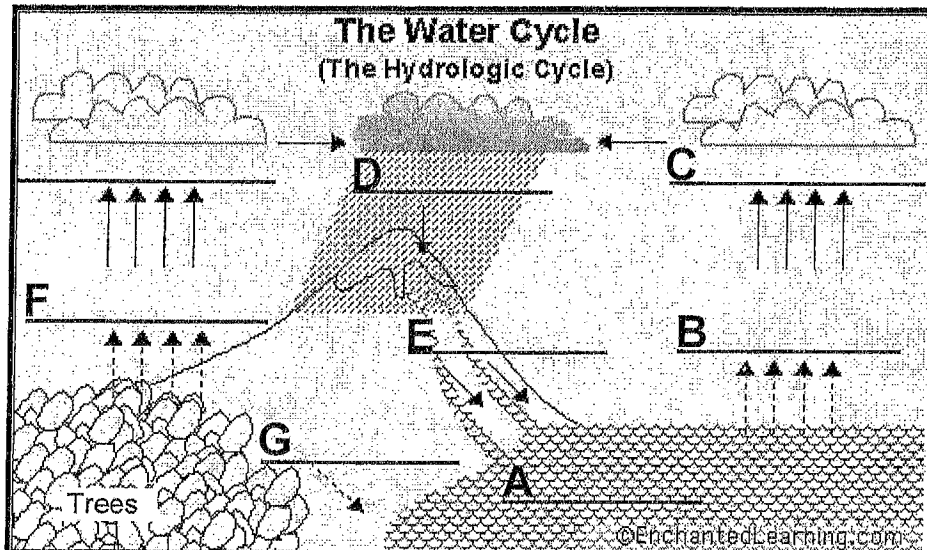
[Source: Google]

SOURCE 2.6



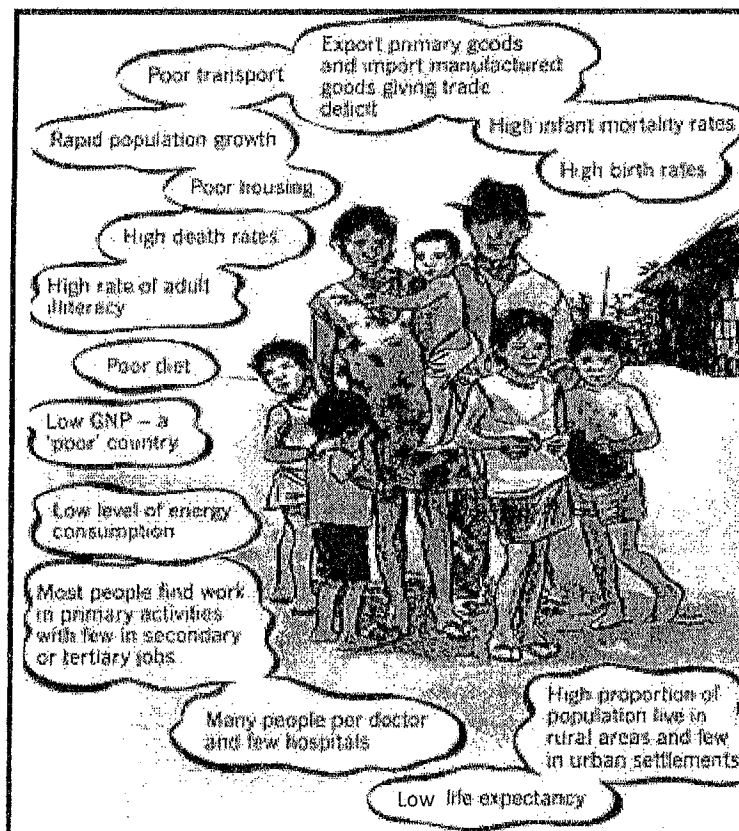
[Source: Google Image]

SOURCE 3.2



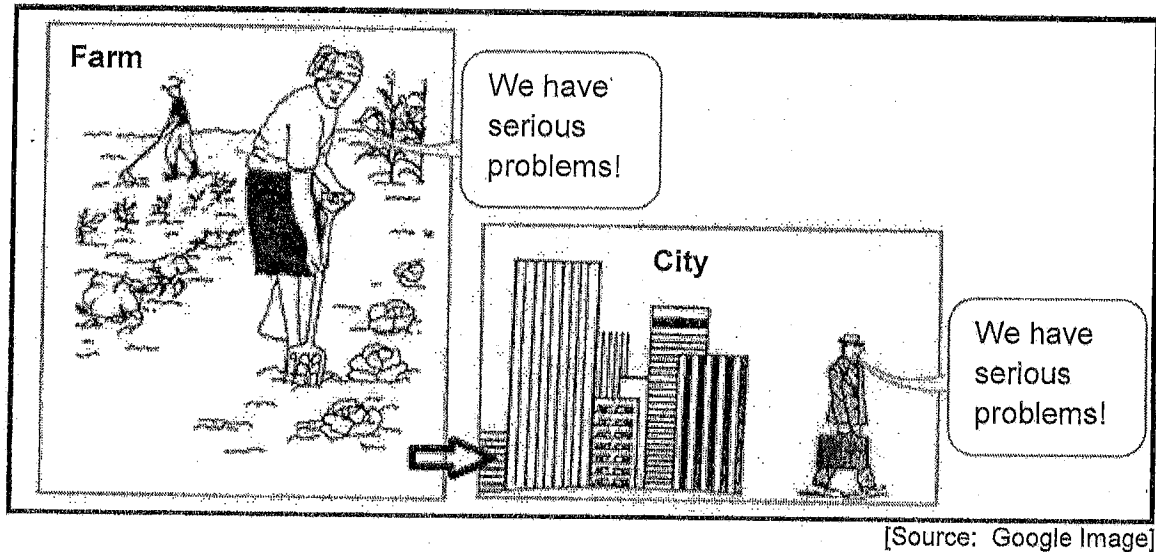
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SOURCE 3.3

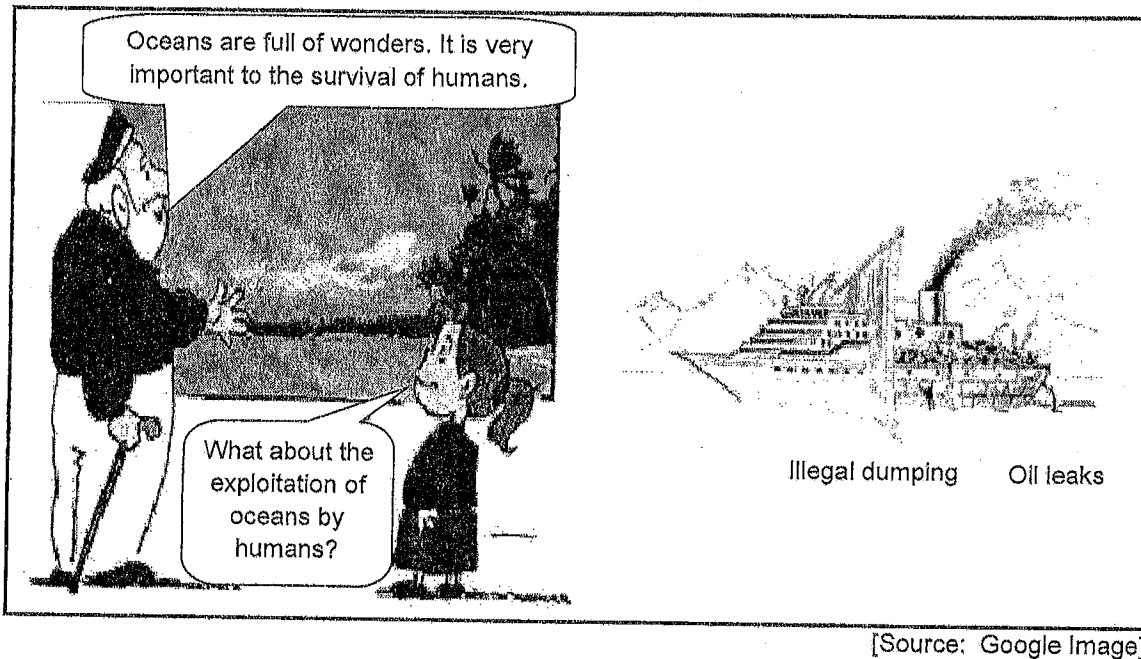


[Source: Google Image]

SOURCE 3.4



SOURCE 3.5



SOURCE 3.6

RIPPLE EFFECT OF EXPLOITING FISH STOCKS

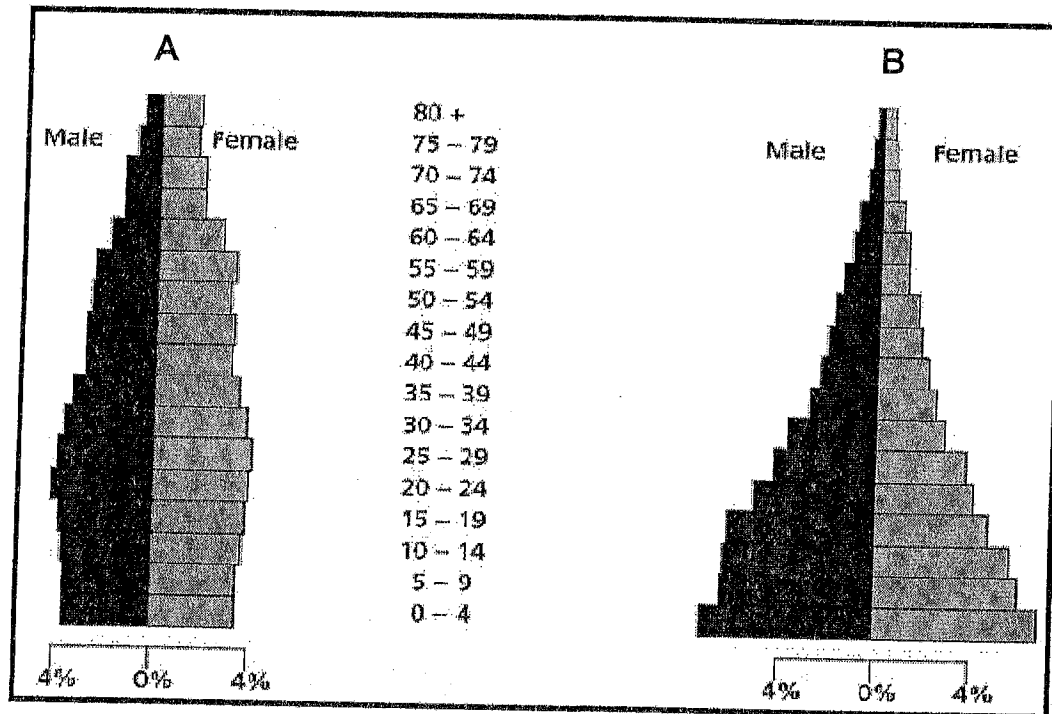
Kamcilla Pillay

Marine biologists predict that fish stocks will be depleted by 2050, upsetting the delicate balance of the world's oceans. The loss of fish will have a domino effect (an effect on one level will affect the next level) where other species are affected, for example whales will have a shortage of food.

This is made worse by the increasing death of coral reefs. Corals store carbon, and this will have an impact on the climate. There is a serious need to investigate other means of harvesting fish.

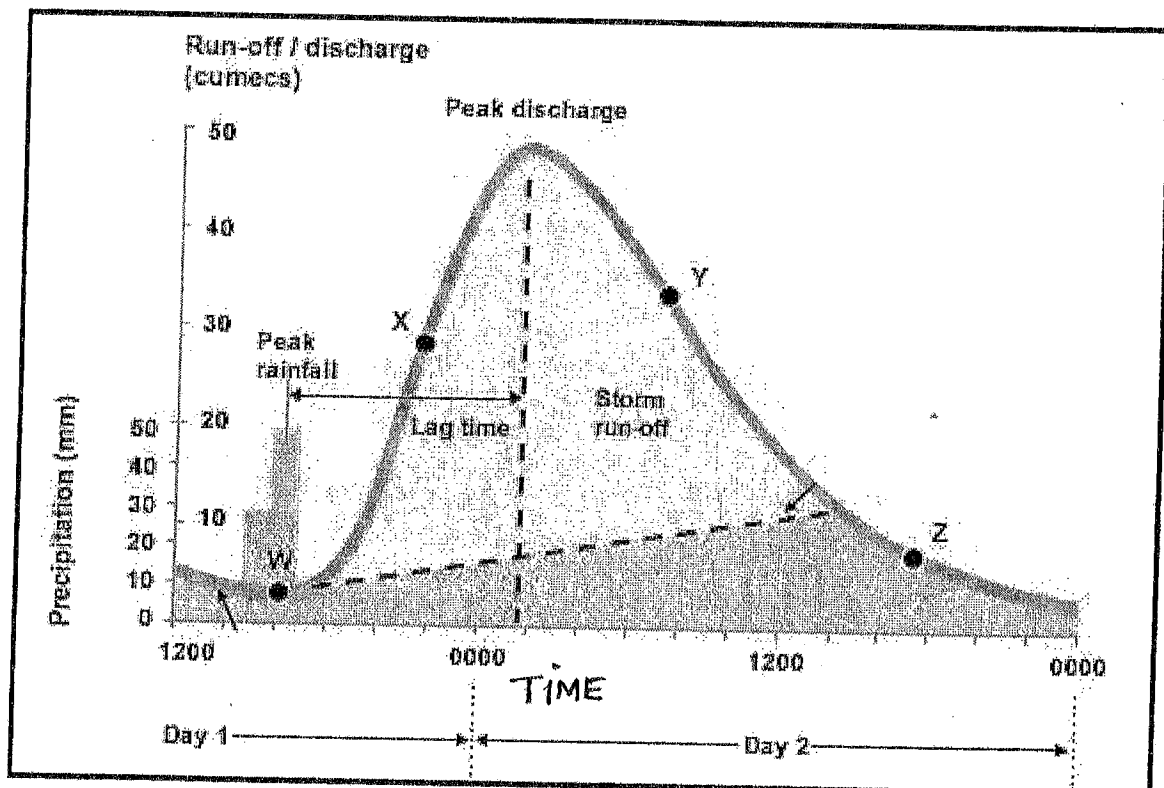
[Source: *Daily News*, June 2011]

SOURCE 4.1



[Source: Google Image]

SOURCE 4.2



[Source: Google Image]

SOURCE 4.3

HIV/AIDS IN SOUTH AFRICA

Among the estimated 40 million people with HIV/Aids around the world at the end of 2001, the vast majority, 28 million, lived in sub-Saharan Africa. The virus has spread at such a rapid rate in South Africa that the country is home to more HIV-positive people than any other nation.

Deaths from HIV/Aids

HIV/Aids killed more people in South Africa during 2001 than in any other country.

Deaths from HIV/Aids, in thousands:

South Africa	360
Zimbabwe	200
Kenya	190
Nigeria	170
Ethiopia	160
Tanzania	140

Child mortality

Child mortality in South Africa as a result of HIV/Aids is likely to grow even worse this decade.

Deaths per 1 000 births by age 5:

	With HIV/Aids	Without HIV/Aids	Total
2000	120	66	186
2010	147	48	195

[Source: Google]

SOURCE 4.4

Case study: South African political migrants

From 1950, many political organisations that opposed the South African government's apartheid policies were banned. If an organisation was banned, it became a crime to belong to that organisation, or to work in any way to further its aims. Penalties for continuing to belong and work for an organisation included house arrest, imprisonment and, even, death. In response to the bannings, many people went into exile. At first the numbers were relatively small, but following the Soweto uprising of 1976, the numbers

swelled as thousands of young people left South Africa. By 1990 there were about 40 000 South African exiles in various parts of the world. As political change came to South Africa, many exiles wished to return. Some had left South Africa with skills, some had been given opportunities to study while out of South Africa, but many had been ordinary soldiers of Umkhonto we Sizwe, and were not well equipped for life outside that structure. For this reason, among others, many returning exiles found it difficult to adjust to life in South Africa.

SOURCE 4.5**HUNDREDS LEFT DESTITUTE**

Shocked residents started counting the cost of this week's floods in the Limpopo town of Hoedspruit. Hundreds of families have been left destitute after severe flooding in the area. Trees were uprooted and cars swept away like toys. A large portion of a road washed away when a dam wall broke. Electricity and water supplies were disrupted and farms destroyed. 600 mm of rain fell in 48 hours. This has been attributed to a tropical low-pressure system in the area. Major relief efforts are under way.

[Source: *Sunday Times*, January 2012]

SOURCE 4.6**DEMAND FOR WATER: 1996 AND 2030**

SECTOR	% CONTRIBUTION TO GDP	1996 (106 m ³ a ⁻¹)	2030 (106 m ³ a ⁻¹)	PERCENTAGE INCREASE
Urban and Domestic	-	2 171	6 936	219,5%
Mining and Industrial	37%	1 598	3 380	111,5%
Irrigation and Forestry	6%	12 344	15 874	28,6%
Environmental	-	3 932	4 225	7,5%
TOTAL	-	20 045	30 415	51,7%

[Source: Google]

P10

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[Signature]
29/12/15

Grade 10 - Geography P.I.
Final Examinations - 2015
Model answer & Marking Memo.

1.1. Crust/Lithosphere

1.1.5. Mantle

1.1.2. Mantle

1.1.6. Crust

1.1.3. Outer Core

1.1.7. Crust

1.1.4. Inner Core

1.2. a) Solar Radiation/Insolation

b) Terrestrial/Earth Radiation

c) ALBEDO

1.2.2. X - Scattering

Y - Reflection

Z - Absorption

1.2.3. CO₂/Methane/Water Vapour

other gases may be mentioned.

1.2.4. Oxygen (O₂)

1.3.1. Summer - Low Pressure over interior

- Relatively high T° / MLC or C/F - Further South

1.3.2. X - Cold Front

Y - Warm Front

1.3.3. 4mb (HP₂)

1.3.4. a) Partly Cloudy ($\frac{1}{2}$)

b) Southerly

c) 20 knots / 20km per hour.

1.4.1. Cumulonimbus (Cb)

1.4.2. large/dense towering clouds

large vertical extent / Anvil shaped → associated with hail, thunder & heavy R/Fall.

1.4.3. Strong convectional currents

High Moisture content

Large scale condensation.

1.4.4. Torrential downpour / hail / thunderstorm Activity

1.5.1. Continental drift

1.5.2. Alfred Wegener

1.5.3. Pangea

1.5.4. They don't believe in the theory.

They think its preposterous.

1.5.5. Similar rock type / age / formation

- Similar fossils

- Coastlines fit - Jigsaw puzzle

- Similar plant & animal life presently.

1.6.1. A hole through which hot ash, gas, lava are emitted.

1.6.2. Extinct

1.6.3. Tall & steep sided

Consists of alternate layers of ash & Lava

1.6.4. Town on fire / half buried → Town in Ruins.

Ships in harbour caught on fire / Acept - hole in Mountain.

People burnt to death

1.6.5. Tourist Attraction - income generated

- Fertile soil → hence farming

- Creation of New Land - ISLANDS / Hot springs / Geysers - electric

Question 2.

2.1.1. Sedimentary Rock

2.1.2. Igneous

2.1.3. Metamorphic

2.1.4. Folding

2.1.5. Warping

2.1.6. Faulting

2.1.7. Rock Cycle.

2.2.1. A) Troposphere

B) Tropopause

C) Mesosphere

2.2.2. 4

2.2.3. 10km.

2.2.4. Stratosphere

2.2.5. Nitrogen/Oxygen/Argon

2.2.6. Troposphere

2.3.1. Increase in the average temp. of the world.

2.3.2. Cattle emit methane gas which contributes to greenhouse gases 20 times faster than CO₂.

2.3.3. (i) Destroys rainforests / Flatulence & manure - produce methane.

(ii) Uses enormous quantities of fresh water

(iii) Clearing of vegetation for grazing / Use of fertilizer

(iv) Transportation of products

(v) Cattle produce ammonia

(Accept Any 3)

* 2.3.4. - Sust ways in which global warming can be reduced.

2.4.1. X - (i) Direct rays of the Sun.

(ii) Y - Indirect/perpendicular.

(iii) X - Smaller surface area - heat concentrated

2.4.2. Degree of latitude.

2.4.3. Dbn - on east coast - Warm Agulhas/Banguel's Current

P. Nolloth - West - Cold Benguel's Current

⇒ These 2 currents influence their respective areas i.e.

Dbn - W.M.C - Warmer P.Noll - C.B.C - colder.

2.51. Violent Vibration of the Earth's crust - sudden slippage

2.52 Richter scale/seismograph.

2.53. Seismogram

2.54. Damage/destruction - Infrastructure

loss of lives (Open Ended - accept any reasonable answer)

2.55. Destructive/Convergent boundaries.

2.56. (i) The fault line runs underground at Port Shepstone thro' the northern part of Kwa Zulu Natal.

(ii) The intervals between major earthquakes is 1000 yrs, and we have passed the time line.

2.57. Dbn - Coastal City - Tsunami -

- High Pop density - built up areas.

- Many industrial sites can be destroyed.

- No evacuation procedures in place - limited earth/Q preparedness.

2.61. Magma cools & solidifies below the earth's surface.

2.62. A - Batholith

B - Laccolith

2.63. B - Mushroom shaped.

C - Saucer-shaped.

2.64. Sill - when magma solidifies in a horizontal column

Dike - when magma solidifies in a vertical/diagonal column.

Complete memo Q 4

Question 3.

3.1.1 E

3.15 A

3.1.2 G

3.16 B

3.1.3 D

3.17 C

3.1.4 F

3.18 J

3.2.1 A - Ocean / Sea.

3.25. E - Run-off

3.2.2 B - Evaporation

3.26. F - Evapotranspiration

3.2.3 C - Condensation

3.27. G - Infiltration

3.2.4 D - Precipitation

3.28.

3.3.1 MEDC

3.3.2. High B/Rates / death Rates
High Inf. Mortality Rate } open Ended.

3.3.3. Poor educⁿ / High literacy rate
Tradition / culture
Lack of Contraception

3.3.4. lack of housing / growth of informal settlements
Lack of Jobs / Traffic congestion / High Crime Rate
Overcrowding / lack of resources / stand. of living drops

3.3.5. Educate / Reduce Immigration
Control Pop.

3.4.1. Rural-urban Migration

2.4.2. Drought / dec soil fertility
lack of Services / poor infrastructure
Lack of Jobs etc

3.4.3. - Ghost Towns.

- Shops schools close down
older people & young - vulnerable

3.4.4. Open. - Improve Rural Areas
Provide Rural Areas with Resources etc.

3.5.1. Ocean are imp't to the Survival of Humans

3.5.2. a) Plankton - provides O₂.

b) Ocean imp't source of food protein (fish)

3.5.3. Warm Agulhas (Moz) + Cold Benguela.

3.5.4. Man catches more fish than required → does not
care about future use (Sustainability)
Man pollutes ocean

3.5.5. Illegal dumping
Oil leaks

3.5.6. Harm fish - lack O₂ - fish can die
Prevent spawning of fish

3.6.1. Depleting fish Stocks. (catching too many fish)

3.6.2. - larger species - eg whale - will have shortage of
fish to feed on. - disrupt food chain

- Reduce food supply for man from sea.

- Fish Price - increase - / - Ind. close down

3.6.3. Fishing Quotas

Closed Seasons

Large Mesh Size

Protecting International Waters

Fines

Fishing licences

Question 4.

4.1.1. A

4.1.5. A

4.1.2. B

4.1.6. B

4.1.3. A

4.1.7. A

4.1.4. B

4.2.1. 50mm

4.2.2. 50 cumecs

4.2.3. lag time

4.2.4. 1:50

4.2.5. Rising limb

4.2.6. Falling limb

4.2.7. Midnight Day two.

4.3.1. The no. of people that die per 1000 of the pop. in a year

4.3.2.1. Increasing trend

4.3.2.2. Increasing deaths - HIV

4.3.3. Illicit / Borety

Promiscuous behaviour

Prostitution / No use of condoms.

4.3.4. Awareness Campaigns

Educⁿ Campaigns

Improve Intervening Rates

Promote Anti-retrov

Promote Abstinence / Regular testing etc

- 4.4.1. b) People that leave bcs they cannot exercise their political opinions.
c) People that move to other countries because of political reasons.
eg. bunny etc.

4.4.2. They would have been incarcerated.

4.4.3. house arrest, imprisonment, death.

4.4.4. Youth day.

4.4.5. not equipped for life outside the structures

4.4.6.

4.5.1. Tropical low

4.5.2. Infrastructure

4.5.3. Trees Uprooted / Families destitute / Cars Washed away / Infra destroyed.

4.5.4. a) farm lands flooded / crops damaged - food needs to be imported at higher price - hence higher food prices

b) Water contaminated - pollutants / burst sewage pipe
No access to fresh / clean water / no med. supplies

4.6.1. Irrigation and forestry.

4.6.2. Rainfall - low & Unreliable in SA

High Evap. Rate / Incorrect irrigation (farming methods)

Pop. Growth - More people to feed.

4.6.3. Minerals eg gold, diamonds - great demand overseas

- hence exported - Income - GDP.

- Ind. - Manufact goods - exported - Income - GDP.

4.6.4. Build dams - store water / Roof Top harvesting

Reduce Evap rates

Conservation - create culture

Water Transfer Schemes

Water Awareness Programs