

KZN DEPARTMENT OF EDUCATION

GREENBURY SECONDARY SCHOOL

NOVEMBER EXAMS – 2017

GEOGRAPHY P1

EXAMINER : S. SINGH DURATION : 3 HOURS  
MODERATOR : R. RANGANATHAN MARKS : 225  
GRADE : 11 DATE : 01/11/2017  
NAME : \_\_\_\_\_ GRADE/DIV : \_\_\_\_\_

INSTRUCTIONS AND INFORMATION

1. This paper consists of 11 pages and a separate addendum of 7 pages.
2. This paper consists of TWO sections, namely SECTION A ( Question 1 and 2) and SECTION B (Question 3 and 4).
3. Answer **ANY THREE** questions of 75 marks each.
4. Rule off after each question.
5. Number your answers correctly according to the numbering system used in this paper.
6. Write your educators initials on the top right hand corner of your answer sheet.
7. Write neatly and legibly.

## SECTION A – ATMOSPHERE AND GEOMORPHOLOGY

### QUESTION 1

1.1 Match the terms in COLUMN B with the descriptions in COLUMN A. Write only the letter of your choice next to the question number.

COLUMN A	COLUMN B
1.1.1 The relief of the earth's surface.	A Desalination
1.1.2 Breakdown of rocks due to chemical, mechanical and temperature differences.	B Plateau
1.1.3 Occurs when ground water evaporates leaving behind dissolved salts on the surface.	C Exfoliation
1.1.4 Removal of broken down material by wind, water or ice.	D Homoclinal ridge
1.1.5 Also known as scarp retreat.	E Topography
1.1.6 The name given to a feature formed when when the rock layers are tilted.	F Backwasting
1.1.7 Outer layers of igneous rock peel off due to temperature changes causing expansion and contraction.	G Weathering
1.1.8 Large high-lying area that is relatively flat.	H Erosion
	I Homoclinal Shifting
	J Coastal Plain

( 8)

1.2 GIVE THE CORRECT TERM FOR THE STATEMENTS BELOW.

- 1.2.1 When a country has access to enough quality food at all times.
- 1.2.2 Evergreen, coniferous vegetation found on mountain slopes in the northern temperate latitudes.
- 1.2.3 A large ecosystem that is characterised by similar climates.
- 1.2.4 A landscape characterised by deep, steep-sided valleys and narrow valley floors.
- 1.2.5 Alternate term used to describe harder, more resistant rock layer lying on top of softer rock.
- 1.2.6 A landform that can be described as an isolated, exposed pile of jointed rocks.
- 1.2.7 The slowest of all mass movements.

( 7)

**1.3 STUDY THE SYNOPTIC WEATHER MAP (FIG 1) AND ANSWER THE QUESTIONS.**

- 1.3.1 Identify line labelled E on the map. 1
  - 1.3.2 State the isobaric interval on this map? 1
  - 1.3.3 Name the low pressure cell, labelled C. 2
  - 1.3.4 What name is given to high pressure A and B. 4
  - 1.3.5 Compare the wind speeds at M and N. Give a reason for your answer. 4
  - 1.3.6 Refer to the station model at Cape Town. Describe the weather using the following elements as headings:
    - 1.3.6.1 Air Temperature
    - 1.3.6.2 Dew Point Temperature
    - 1.3.6.3 Cloud Cover
    - 1.3.6.4 Wind Direction4
- (16)

**1.4 STUDY THE DIAGRAM (FIG 2) AND ANSWER THE QUESTIONS.**

- 1.4.1 Explain what you understand by the term **Coriolis force**. 2
  - 1.4.2 What causes the formation of the coriolis force? 2
  - 1.4.3 Distinguish between the effects of the coriolis force in the northern and southern hemisphere. 4
  - 1.4.4 Explain how the strength of the coriolis force changes from 5° of the equator towards the 30° latitudes. 2
  - 1.4.5 Name and explain the force labelled A. 3
  - 1.4.6 What is the resultant wind at C called? 1
- (14)

**1.5 REFER TO FIGURE 3 ON CIRCULATION IN THE ATMOSPHERE AND ANSWER THE QUESTIONS.**

- 1.5.1 Name the type of air circulation on the diagram. 1
- 1.5.2 Identify the cells labelled P, Q and R. 3
- 1.5.3 Explain how cell P is formed. 4
- 1.5.4 Identify the type of air movements at A, B and C. 3
- 1.5.5 Explain why deserts form at 30° north and south of the equator. 4

**1.6 STUDY FIGURE 4 ON MASS MOVEMENTS AND ANSWER THE QUESTIONS.**

- 1.6.1 Provide TWO pieces of evidence from the diagram indicating that mass movement is taking place. 2
- 1.6.2 Name the THREE types of mass movements described:
  - 1.6.2.1 Soil that becomes heavy with water and moves down a slope.
  - 1.6.2.2 Boulders that bounce and land at the foot of cliffs.
  - 1.6.2.3 When the top layer of the soil flows over the frozen bottom layer.3
- 1.6.3 Why is it necessary to understand the consequences of mass movements before building on slopes. 2
- 1.6.4 Write a paragraph discussing how man can minimise the effects of mass movements.(4 answers) 8

(15)

**TOTAL QUESTION 1 = 75**

## QUESTION 2

### 2.1. PROVIDE THE CORRECT TERM/CONCEPT FOR THE DESCRIPTIONS BELOW.

- 2.1.1 Lack of rainfall over a prolonged period of time.
- 2.1.2 Warm dry winds that blow across Central Europe.
- 2.1.3 Equal length of day and night.
- 2.1.4 Climatic region of Cape Town.
- 2.1.5 Heated air travelling upwards.
- 2.1.6 Loss of healthy, fertile soils in low rainfall regions.
- 2.1.7 Midday sun directly overhead at one of the tropics.

( 7 )

### 2.2 MATCH THE STATEMENT IN COLUMN B WITH A CONCEPT IN COLUMN A. WRITE THE NUMBER 1.1.1-1.1.8 AND THE LETTER THAT IS CORRECT NEXT TO THE NUMBER. EG. 1.1.9 J.

COLUMN A	COLUMN B
2.2.1 El Nino	A. Africa and Australia suffers drought
2.2.2 Summer solstice in the Northern Hemisphere	B. Above average rains in Africa and Australia
2.2.3 La Nina	C. 21 June
2.2.4 Insolation	D. Heat waves bouncing off the land
2.2.5 Deserts	E. 22 December
2.2.6 Summer Solstice in the Southern Hemisphere	F. Found on the west coasts of the Africa
2.2.7 Radiation	G. Difference between highest and lowest temperature.
2.2.8 Temperature range	H. Incoming solar radiation

( 8 )

### 2.3 STUDY FIGURE 5 REPRESENTING MONSOON CONDITIONS OVER INDIA.

- 2.3.1 What is the ITCZ? 2
  - 2.3.2 Explain the position of the ITCZ in summer and winter over India. 4
  - 2.3.3 Why does the wind at **A** change direction from south east to south west? 2
  - 2.3.4 Discuss TWO negative and TWO positive effects of the summer monsoon. 8
- (16)

**2.4 STUDY FIGURE 6 AND ANSWER THE QUESTIONS.**

- 2.4.1 Match the letters **P, Q** and **R** with THREE of the following landforms.  
*Mesa, Cuesta, Plateau, Butte.* 3
- 2.4.2 Name the four slope elements labelled A,B,C and D. 4
- 2.4.3 Differentiate between the shape of slope A and D. 2
- 2.4.4 State TWO reasons why slope D is most suitable for agriculture. 4
- 2.4.5 Name the level surface the above landscape will eventually become with time. 1  
(14)

**2.5. REFER TO FIGURE 7 BASED ON INCLINED STRATA AND ANSWER THE QUESTIONS.**

- 2.5.1 Name slopes B and C. 4
- 2.5.2 Mesas will not develop in this landscape. Give a reason why this is so. 2
- 2.5.3 Suggest ONE way in which ridges, such as cuestas, are significant to humans. 2
- 2.5.4 Write a paragraph in which you compare the differences between Cuestas and Hogbacks 8  
(16)

**2.6 READ THROUGH THE ARTICLE (FIGURE 8) ON THE SAHEL DESERT AND ANSWER THE QUESTIONS THAT FOLLOW.**

- 2.6.1 Define the term desertification. 2
- 2.6.2 List TWO causes of desertification mentioned in the article. 2
- 2.6.3 Describe ONE negative effect of desertification on the environment. 2
- 2.6.4 Write a short paragraph of approximately 8 lines in which you explain sustainable strategies that can be implemented, to manage desertification. 8  
(14)

**TOTAL QUESTION 2 = 75**

## SECTION B – DEVELOPMENT, RESOURCES AND SUSTAINABILITY

### QUESTION 3

#### **3.1 PROVIDE THE CORRECT TERM/CONCEPT WHICH MATCHES THE DESCRIPTIONS BELOW.**

- 3.1.1 The ability of a country to have access to its resources to create economic wealth.
- 3.1.2 The balance between monetary value of a country's export and imports.
- 3.1.3 Restrictions put on imported goods, regarding its weight, volume and amount.
- 3.1.4 The import of goods from other countries is restricted.
- 3.1.5 Trade blockages are used to prevent the influx of commodities that might threaten local production.
- 3.1.6 Direct aid from one country to another.
- 3.1.7 Aid for individuals or countries in times of natural disasters or civil conflict.

( 7 )

#### **3.2 VARIOUS OPTIONS ARE GIVEN AS POSSIBLE ANSWERS TO THE MULTIPLE CHOICE QUESTIONS BELOW. CHOOSE THE CORRECT ANSWER AND WRITE ONLY THE LETTER NEXT TO THE QUESTION NUMBER.**

- 3.2.1 Which of the sources is not a renewable resource?
  - A Biomass
  - B Water
  - C Natural gas
  - D Wind
- 3.2.2 Which type of electricity is produced in volcanic areas where the heat of the rocks is used to create enough energy?
  - A Petroleum
  - B Coal
  - C Geo thermal
  - D Hydroelectricity
- 3.2.3 Provide the name of the energy which produces ethanol fuel through the use of sugar and maize.
  - A. Biomass
  - B. Geo thermal
  - C. Nuclear power
  - D. Thermal power.

3.2.4 Which of the following sources is not fossil fuel?

- A. Oil
- B. Natural gas
- C. Uranium
- D. Coal

3.2.5 Which panels are used to produce electrical energy?

- A. Coal
- B. Solar
- C. Geo thermal
- D. Wind

3.2.6 The source which produces nuclear energy.

- A. Uranium
- B. Coal
- C. Petroleum
- D. Natural gas

3.2.7 Which of the following sources has high potential, but is currently underutilised in South Africa?

- A. Uranium
- B. Coal
- C. Water
- D. Geo thermal

3.2.8 Which of the sources causes more acid rain in urban areas?

- A. Natural gas
- B. Biomass
- C. Uranium
- D. Coal

( 8)

**3.3. STUDY THE GRAPH(FIGURE 9) AND ANSWER THE QUESTIONS.**

3.3.1 Define the following terms:

- 3.3.1.1 GDP/capita 2
- 3.3.1.2 Life Expectancy 2

3.3.2 Use the graph as a guide to match these countries, Poland, Sierra Leone, Singapore with the following HDI: 0,901; 0,813; 0,336. 3

3.3.3 Name TWO countries that have a GDP/capita in the range of 30 000 to 40 000 US \$. 2

3.3.4 Explain the relationship that exists between GDP/ capita and life expectancy. 2

3.3.5 Discuss TWO disadvantages of using the GDP as an indicator of wealth. 4

(15)

**3.4 REFER TO THE CARTOON (FIGURE10) AND ANSWER THE QUESTIONS.**

- 3.4.1 Why would the relationship between developing and developed countries in the above cartoon be described as conditional aid? 2
- 3.4.2 Name ONE other type of aid you studied. 1
- 3.4.3 Developing countries seek aid when they have an unfavourable trade balance  
What is an unfavourable trade balance? 2
- 3.4.4 Discuss TWO disadvantages of unfavourable trade balance. 4
- 3.4.5 Name TWO measures a developing country can put in place to restrict imports in their country. 4
- 3.4.6 Why is foreign aid in the form of money not the right approach to follow to improve the standard of living in Africa? 2

(15)

**3.5 STUDY FIGURE 11 SHOWING METHODS BEING USED TO PREVENT SOIL EROSION AND ANSWER THE QUESTIONS.**

- 3.5.1 Name the soil erosion prevention practices at A and B respectively. 2
- 3.5.2 Why is soil a renewable resource? 1
- 3.5.3 Explain TWO advantages of method A in protecting the soil. 4
- 3.5.4 Discuss the negative effects that soil erosion will have on the broader economy of South Africa.(4 answers) 8

(15)

**3.6 THE EXTRACT IN FIGURE12 COMES FROM PRESIDENT ZUMA'S STATE OF THE NATIONS ADDRESS OF 2015.**

- 3.6.1 Name ONE short and medium term plan the government wants to implement to deal with South Africa's electricity challenges. 1
- 3.6.2 "The long-term plan involves finalising our long-term energy security masterplan", according to president Zuma. Explain TWO measures that should be included in such a "masterplan" to increase the energy output in South Africa.(2 answers) 4
- 3.6.3 Eskom is forced to use load shedding as a measure to reduce the burden on power stations. Discuss the effects that loadshedding has on small businesses. (3 answers) 6
- 3.6.4 The use of diesel generators by Eskom, to fill the gap when power supply runs low, is common practice. Evaluate how sustainable this process is for the country as a whole.(2 answers) 4

(15)



#### **QUESTION 4**

**4.1 MATCH THE STATEMENTS IN COLUMN A WITH THE CORRECT ANSWER FROM COLUMN B. WRITE ONLY THE ALPHABET FROM COLUMN B.**

<b>COLUMN A</b>	<b>COLUMN B</b>
4.1.1 Buying and selling of goods and services.	A. Trading Blocs
4.1.2 Commodity brought into a country.	B. Industrial Development Zones
4.1.3 Groups of countries that have common markets or trade agreement.	C. Outsourcing
4.1.4 Industrial estates aimed at economic growth and new investment.	D. Globalisation
4.1.5 Trade involving businesses that are not registered.	E. Import
4.1.6 The total value of goods and services produced in a country in one year.	F. Visible trade
4.1.7 When one aspect in the production of a product is done under contract by an outside company.	G. Gini co-efficient
4.1.8 The total value of goods and services produced in a country by the permanent inhabitants in one year	H. Decentralisation
	I. GNP
	J. GDP
	K. Informal Sector
	L. Trade

( 8)

**4.2. STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE.**

- 4.2.1 Quaternary activities include all primary, secondary and tertiary activities.
- 4.2.2 Greenfield sites are the new sites for development located in a city.
- 4.2.3 One of the millennium development goals is to increase poverty and hunger.
- 4.2.4 Urban development involves providing a better life for people working in urban areas.
- 4.2.5 Gender inequality is when men and women don't have equal conditions for realising their potential to contribute towards and benefit from development.
- 4.2.6 Carbon footprint refers to the amount of carbon dioxide or other carbon compounds in the atmosphere.
- 4.2.7 Multinational companies operate in one country.

( 7)

**4.3. STUDY FIGURE 13 ON GLOBALISATION AND ANSWER THE QUESTIONS.**

- 4.3.1 Define the term "globalisation". 2
- 4.3.2 Explain the meaning of "multinational companies". 2
- 4.3.3 Give ONE reason for the mobile nature of the garment industry. 2
- 4.3.4 Why do companies set up factories in developing countries? 2
- 4.3.5 Discuss any THREE problems associated with globalisation. 6  
(14)

**4.4 READY THE CASE STUDY FIGURE 14 AND ANSWER THE QUESTIONS.**

- 4.4.1 Explain how being regarded by the law as a minor is demeaning to women in Lesotho. 2
- 4.4.2 List any THREE problems faced by women in Lesotho. 6
- 4.4.3 Explain how the plight of women in Lesotho can impact on its economic development . ( 2 answers) 4
- 4.4.4 Suggest TWO possible reasons why discrimination against women is associated with countries that are less developed economically. 4  
(16)

**4.5 REFER TO FIGURE 15 SHOWING A SOIL PROFILE AND ANSWER THE QUESTIONS.**

- 4.5.1 What is a soil profile? 2
- 4.5.2 Of what importance is soil horizon A to humans. 2
- 4.5.3 What role does bedrock play in soil formation? 2
- 4.5.4 Explain the role of climate in soil formation. (2 answers) 4
- 4.5.5 Why can one say that the soil profile in the figure is that of mature soil? 2  
(12)

**4.6 READ THE NEWSPAPER ARTICLE IN FIGURE 16 AND ANSWER THE QUESTIONS.**

- 4.6.1 What is nuclear power? 2
- 4.6.2 Where is South Africa's only nuclear power plant located? 2
- 4.6.3 Despite the many advantages of nuclear power, South Africa still relies heavily on conventional energy resources to generate electricity. Briefly explain why this is the case (2 answers) 4
- 4.6.4 Give ONE reason for the delay of building nuclear power plants in South Africa? 2
- 4.6.5 With reference to the advantages and disadvantages of nuclear power, write down FOUR reasons why you agree or disagree with the government's decision to build more nuclear power stations. 8  
(18)

**TOTAL QUESTION 4 = 75**

**END OF PAPER**

**GREENBURY SECONDARY SCHOOL**



DEPARTMENT OF HSS

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27/10/17

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# GEOGRAPHY

## ADDENDUM

FINAL EXAM

GRADE 11

2017

THIS ADDENDUM CONSISTS OF 7 PAGES

FIGURE 1

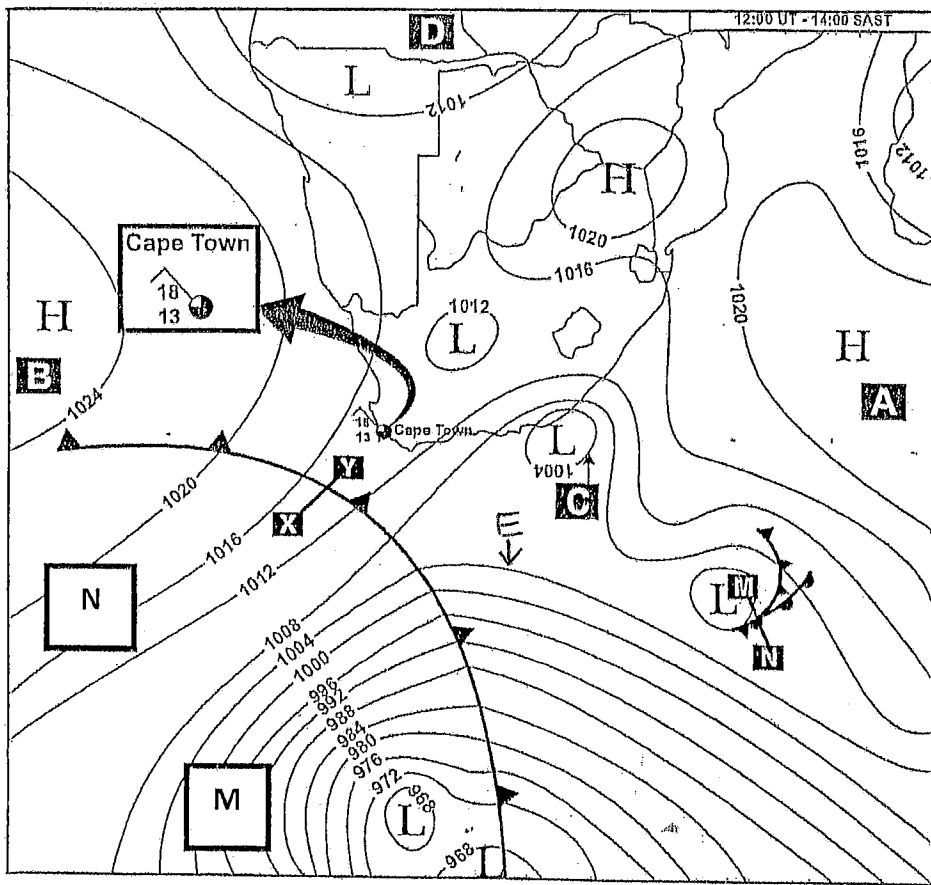


FIGURE 2

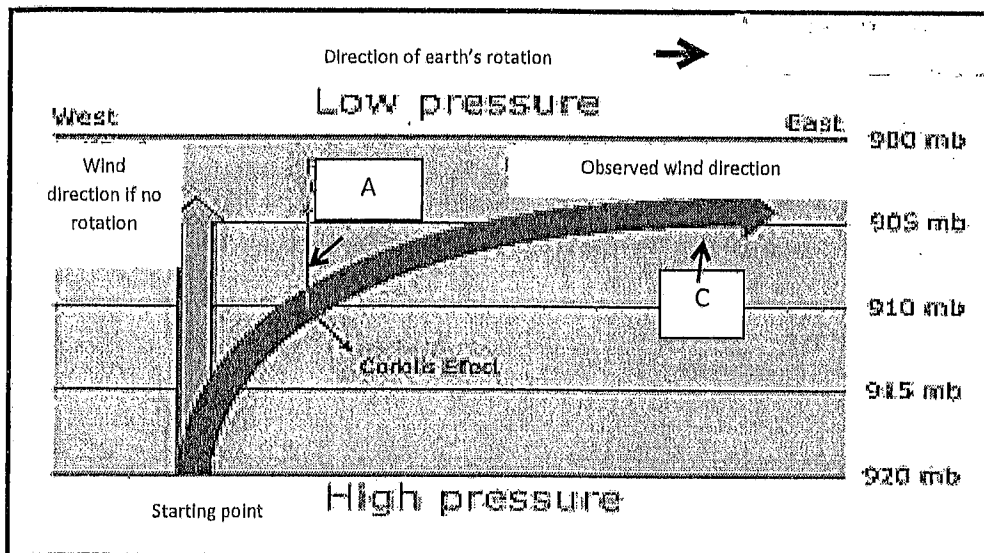


FIGURE 3

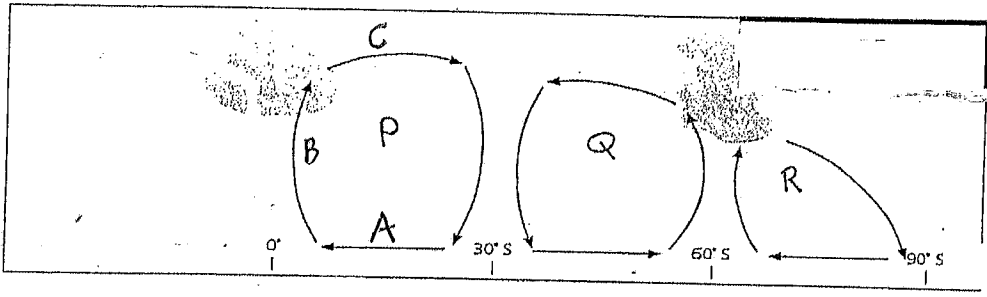


FIGURE 4

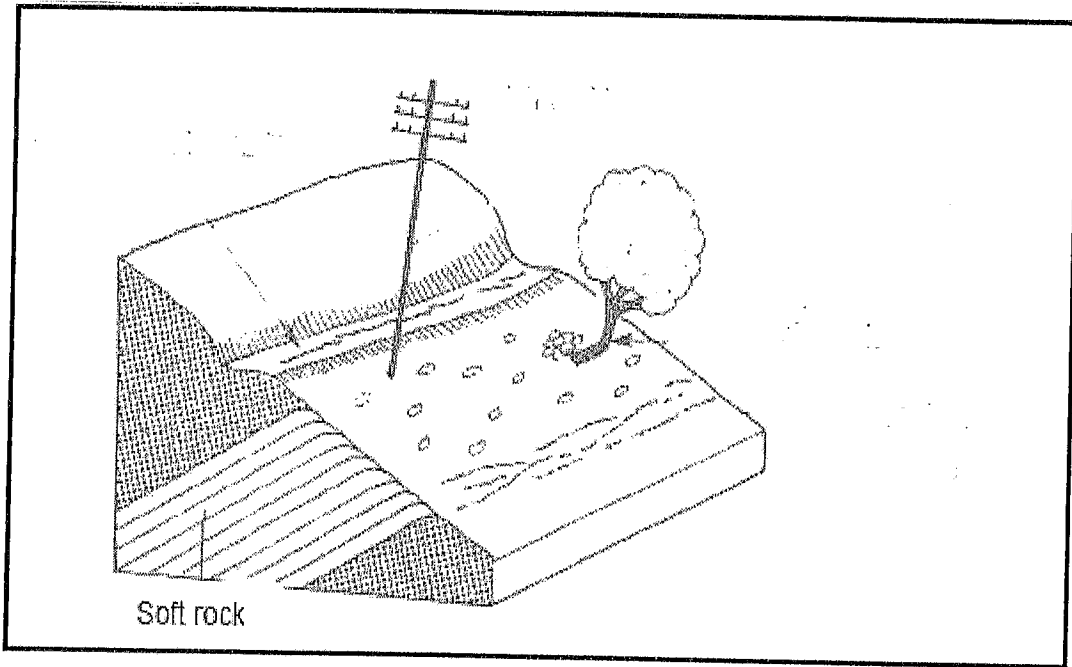


FIGURE 5

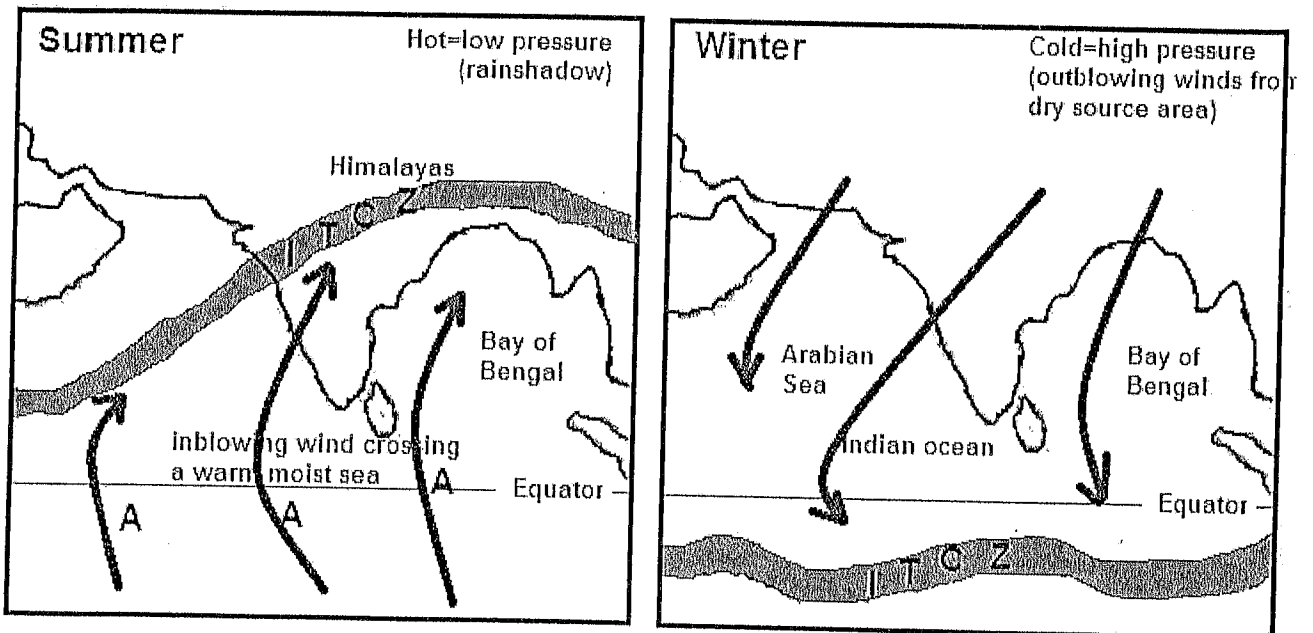


FIGURE 6

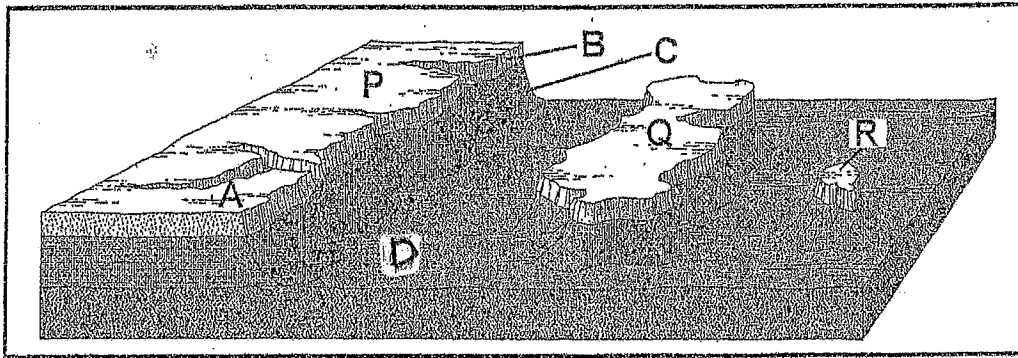


FIGURE 7

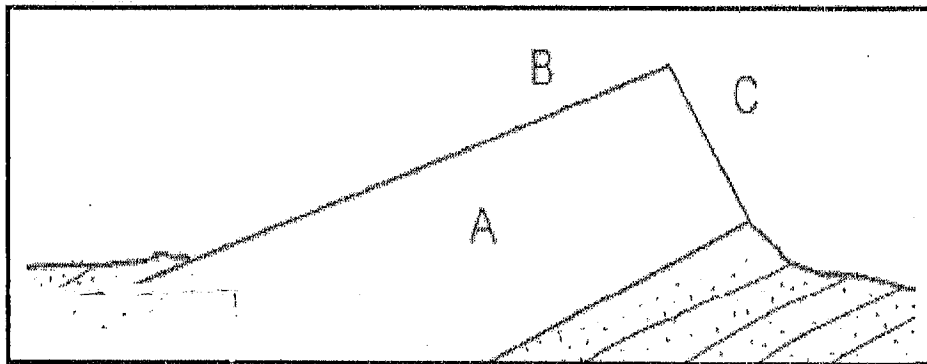


FIGURE 8

### The Sahel Desert

In the Sahel Desert, desertification is becoming a huge problem. Around the 1950's people settled into the Sahel region, in areas where there was water. This resulted in overgrazing, which is one of the greatest causes of desertification. Eventually, the perennial shrubs were destroyed because of grazing, and they were replaced by annuals. Then the annuals were grazed out which left bare soil. A lot of the topsoil was washed away, and all that was left were rocks. Silt turned hard when it was hit by rain. Therefore, plants were not able to grow because their roots could not penetrate this hard layer. Now this region has turned to desert and it continues to expand. Records show that rainfall in the Sahel has decreased and sands have shifted about sixty miles south into the area. Sahel is expanding due to lack of vegetation in the area. Another reason desertification is happening in the Sahel region is because people are using the slashing and burning method to clear land. This degrades the quality of soil just like overgrazing.

[Source: (No name). *Desertification – a Threat to the Sahel*. (2000)]



FIGURE 9

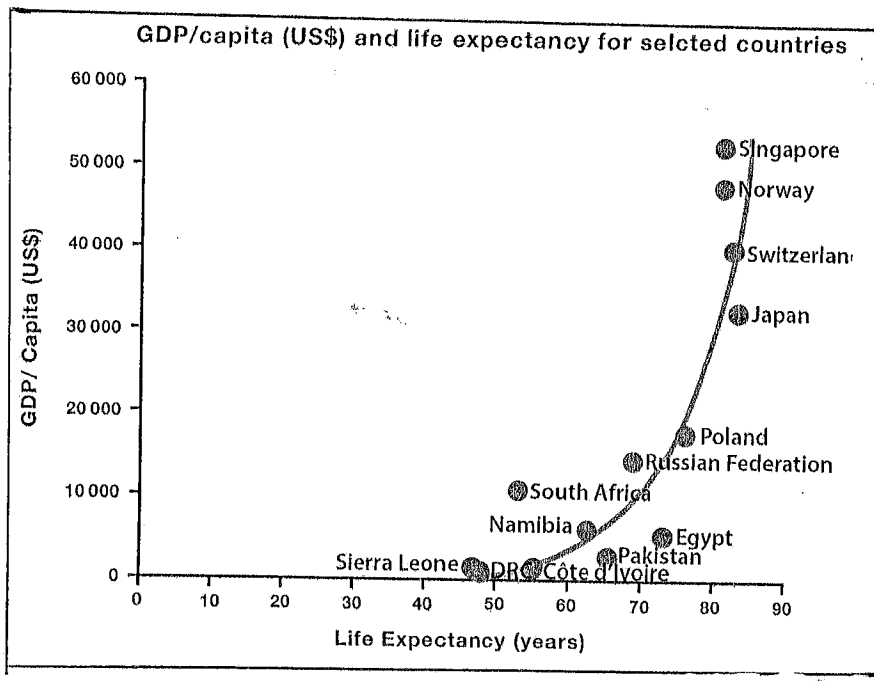


FIGURE 10

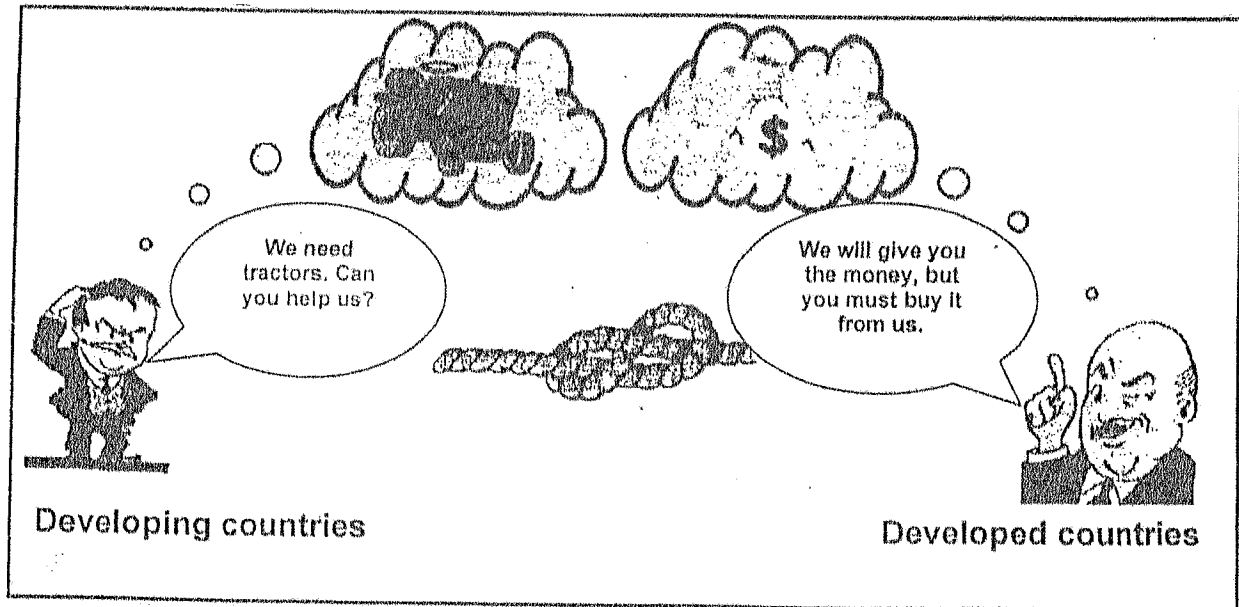


FIGURE 11

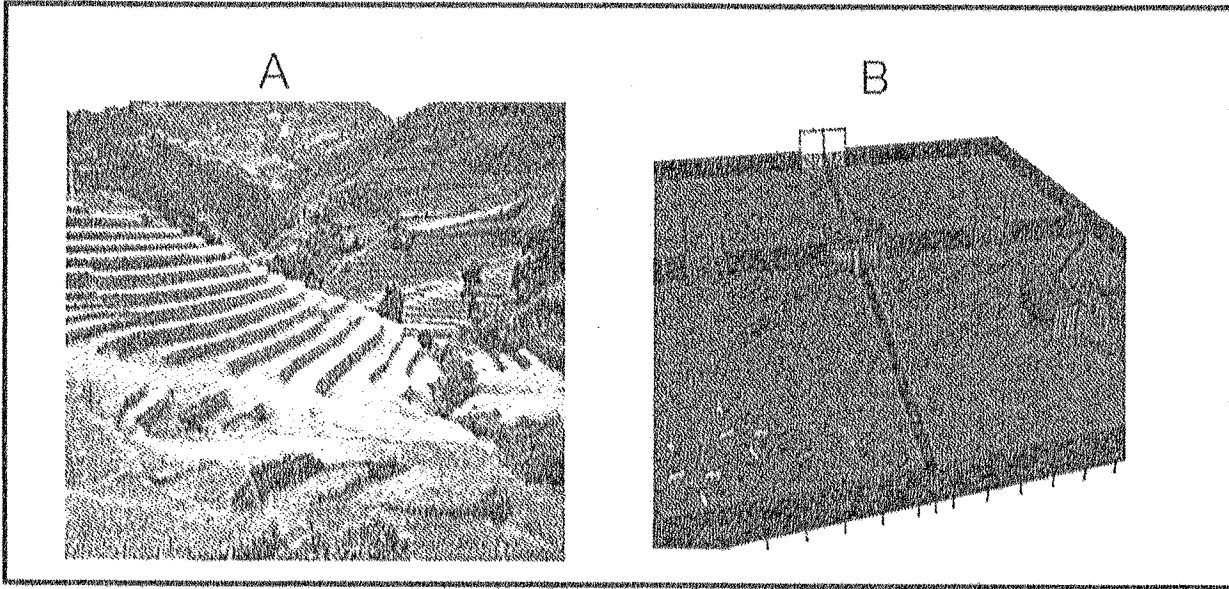


FIGURE 12

## **Bold plan to tackle South Africa's energy crisis**

*13 February 2015*

President Jacob Zuma dedicated much of his State of the Nation Address (Sona) on 12 February to explain plans that are in motion to deal with the country's electricity challenges. Delivering the 2015 Sona in the National Assembly in Cape Town, Zuma unveiled a battle plan aimed at resolving short- and long-term energy challenges. He was speaking as Eskom's power grid remained constrained, with the power utility being forced to implement load shedding.

"We have developed a plan which involves short-, medium- and long-term responses. The short- and medium-term plan involves improved maintenance of Eskom power stations, enhancing the electricity generation capacity and managing the electricity demand," said Zuma.

"The long-term plan involves finalising our long-term energy security master plan. As a priority we are going to stabilise Eskom's finances to enable the utility to manage the current period. In this regard, [the] government will honour its commitment to give Eskom around R23-billion in the next fiscal year."

Energy constraints hindered economic growth and were a major inconvenience to economic growth.

FIGURE 13

### TEXTILE WORKERS IN EAST AND SOUTH EAST ASIA



The highly mobile nature of the garment industry has a major impact on labour in the East and South East Asian region. This mobility makes the workers very insecure.

Approximately 75% of the 11,2 million people that work in the global garment industry are women.

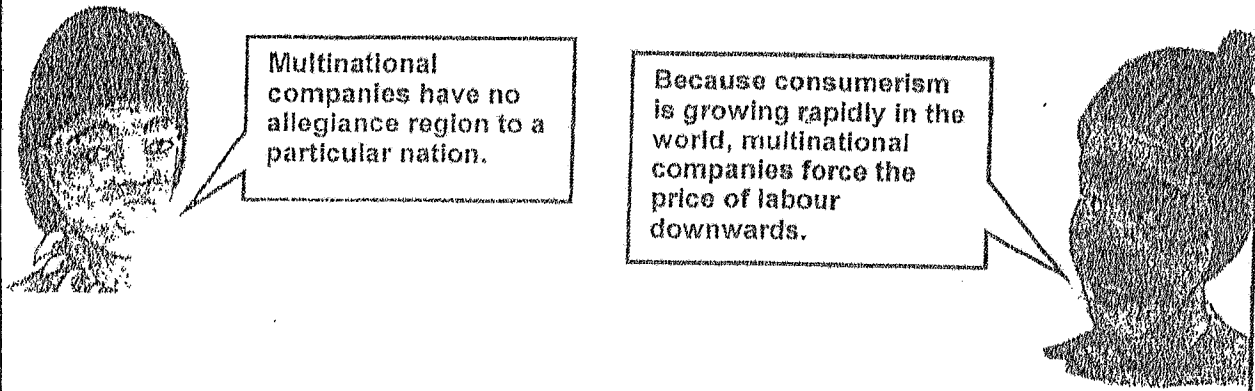



FIGURE 14

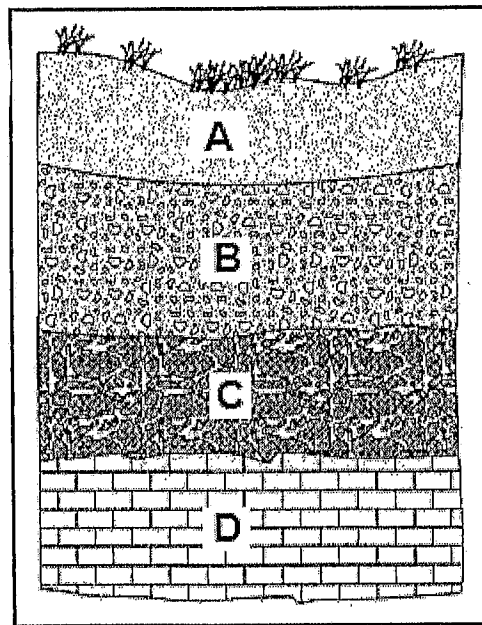
#### Women in Lesotho

In Lesotho women are regarded by the law as minors – they are considered children in the eyes of the law. This makes them dependent on the male members of their immediate family. But a greater problem arises when work of any sort is concerned: women cannot open bank accounts, apply for passports, or enter into any financial or other contracts. This is a great obstacle because women are often the main caregivers and often the main breadwinners. Their prevention from handling financial arrangement blocks any possibility for them to start their own small businesses. They cannot get loans for agriculture, schooling or housing. They cannot inherit property. Land and housing cannot be registered in the name of married women.



Lesotho's Gender Minister Mathabiso Lepono, 2010

FIGURE 15



[Source: Google Search]

FIGURE 16

While the likely cost of South Africa's planned nuclear power stations has been grabbing headlines, a more pertinent question is: When will they actually be built?

The IRP2010 plan – released in April 2010 – called for the construction of six nuclear stations generating 9,6 GW of energy by 2030, with a new 1 600 MW nuclear power plant to be built every year between 2023 and 2026, and the last two in 2028 and 2029.

In practical terms, a decision needed to be made within a year to go ahead with the first two of those planned six new nuclear stations. That has not happened. It was announced in mid-September that South Africa was postponing a decision by one year for safety reasons after the tsunami incident at Japan's Fukushima nuclear plant in March 2012.

It was stressed that, globally, coal was 'here to stay' as an energy source until at least 2035, despite intense environmental opposition.

– Brendan Ryan (adapted)

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27/10/17

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## Marking Memo

Geog - Gr 11 - Nov 2017.

### Question 1

1.1.1. E

1.1.2. G

1.1.3. A

1.1.4. H

1.1.5. F

1.1.6. D

1.1.7. C

1.1.8. B

1.2.1. Food Security

1.2.2. Alpine

1.2.3. Biome

1.2.4. Canyon

1.2.5. Cap rock

1.2.6. Tors

1.2.7. Soil Creep.

1.3.1. Isobars

1.3.2. 4 mb

1.3.3. Cut-off low

1.3.4. A - South Indian High

B - South Atlantic High

1.3.5. M - gentle wind - isobars close together

N - strong wind - isobars far apart

1.3.6.1.  $18^{\circ}$

1.3.6.2.  $13^{\circ}$

1.3.6.3. Partly cloudy

1.3.6.4. N.W.

(2)

1.4.1. A force that causes deflection of the wind as it blows from HP to LP.

1.4.2. Rotation of the earth / difference in linear speed of rotation.

1.4.3. N.H - deflects to right

S.H - deflects to left

1.4.4. C.F weakens so it moves from equator to higher latitudes.

1.4.5. Pressure Gradient Force - refers to the difference in atmospheric pressure bet a HP + LP area.

1.4.6. Geostrophic Wind.

1.5.1. Tri-cellular Arrangement / Primary / Global.

1.5.2. P - Hadley Cell / Tropical Cell

Q - Ferrel Cell / Mid. Lat. Cell

R - Polar Cell

1.5.3. HP at the equator causes air to be heated and rises. This results in a LP. As air rises, it cools and sinks back to the surface.

X 1.5.4. A - converging

B - rising

C - diverging.

X 1.5.5. At  $30^\circ$  subsidence of air hence no condensation / evaporation = no rainfall.

1.6.1. Gashes in road.

Tilted telephone pole

Tree turned downslope

Terraces (Any 2)

1.6.2.1. Mudflow

1.6.2.2. Rock falls

1.6.2.3. Solifluction

1.6.3. People need to understand the dangers of mass movements so that they could prevent loss of property and life.

1.6.4.

Minimise effects - concrete walls, cables, buttresses.

Plant vegetation to prevent erosion.

Re-grade slope.

Adequate drainage so that parts of the slope do not get washed away by water.

Concrete layers over slope.

Mesh wiring to contain slope movements.

Drill metal stakes into rock to stabilise.

Proper engineering when constructing on slopes.

④

## Question 2.

2.1.1. Drought

2.1.2. Föhn Winds

2.1.3. Equinox

2.1.4. Mediterranean

2.1.5. Convection

2.1.6. Desertification

2.1.7. Solstice.

2.2.1. A

2.2.2. C

2.2.3. B

2.2.4. H

2.2.5. F

2.2.6. E

2.2.7. D

2.2.8. G.

2.3.1. Belt of LP near the equator where trade winds of the N+S hemisphere converge.

2.3.2. Summer - moves north

Winter - moves south

2.3.3. When it crosses the equator it changes due to Ferrell's law.

2.3.4. Negative → Floods destroy houses, infrastructure + farm land.

Mudslides - bury villages / destroy crops.

Positive - Fills up dams + wells.

Softens hard soil → easier to cultivate.

Can generate hydroelectricity.



(5)

2.4.1. P - Plateau

Q - Mesa

R - Butte.

2.4.3. A - convex

D - concave.

2.4.2. A - Crest

B - Cliff

C - Talus

D - Pediment.

2.4.4 Gentle slope

Water does not run-off

Accumulation of fertile soil. (Any 2)

2.4.5. Pediplain / peneplain

2.5.1. B - dip slope  
C - scarp slope.

2.5.2. Mesa form on horizontal strata and this is inclined strata.

2.5.3. Difficult to construct transport networks.

Scarp slopes cannot be used for farming - too steep and rocky.

Forestry is practiced on the dip slope since they do not require fertile soil.

Settlements develop on dip slopes as they are gentle.

Basin crestas have artesian wells that trap oil.

2.5.4. Cuesta

- asymmetrical in shape.
- dip slope is gentle.
- angle of dip slope is  $25^\circ$ .

- cuesta is a Spanish word meaning slope.

Hogsback.

- symmetrical in shape.
- dip slope is steep.
- angle of dip slope is  $> 40^\circ$ .

- named after the knobbly spine of a hog.

2.6.1. Process whereby fertile areas become increasingly dry - desert-like.

2.6.2. Overgrazing

Burning of the land.

2.6.3. Poorer soil, more saline.

Less vegetation cover - more soil erosion.

Damage to natural habitats - reduces plants/animals.

Reduces groundwater levels, increases evapo-transpiration.

(7)

2.6.4. Proper soil management reduces the risk of severe soil erosion.

Afforestation programmes.

Destroy alien plants.

Enlisting the support of local farmers.

Land management - find ways of making a living in drought conditions.

(1)

(1)

Question 3

- 3.1.1. Economic development
- 3.1.2. Balance of trade
- 3.1.3. Import quotas
- 3.1.4. Embargo
- 3.1.5. Protectionism
- 3.1.6. Bilateral aid
- 3.1.7. Humanitarian aid.

3.2.1 C

3.2.2 C

3.2.3 A

3.2.4 C

3.2.5 B

3.2.6 A

3.2.7 A

3.2.8 D

3.3.1.1. GNP divided by the total no. of people in a country.

3.3.1.2. Average age. person is expected to live in a country.

3.3.2. Poland - 0,336.

Sierra Leone - 0,813

Singapore - 0,901

3.3.3. Japan, Switzerland

3.3.4. High GDP/capita = longer LE / vice versa.

3.3.5. Values could be manipulated if a govt. wants to be poor to collect aid.

Does not take into account subsistence / informal economies.

(9)

3.4.1. Involves terms of repayment / loan.

3.4.2. Technical, Humanitarian, Bilateral.

3.4.3. When imports exceeds exports.

3.4.4. High level of unemployment.

Low standard of living.

Slow economic growth.

3.4.5. Trade tariffs and import quotas <sup>Import duties / substitutes</sup>

3.4.6. Govt. can utilise money for other uses / corruption, etc. / takes a lot of time to pay off debt.

3.5.1. A - Terracing

B - Rotational Grazing

3.5.2. Formation of soil is an ongoing process.

3.5.3. Inexpensive method of increasing arable land.

Flat area makes it possible to use machinery.

3.5.4. Leads to decrease in production.

Food prices will increase as agricultural products will have to be imported.

Loss of foreign income as exports decrease.  
Negative impact on GDP.

(10)

3.6.1. Improved maintenance of Eskom power stations /  
Managing the electrical demand. (Any 1)

3.6.2. Increase the use of non-conventional  
energy production to reduce use of coal.  
Management of energy in a more sustainable  
way.

Increase govt. investment to keep energy  
prices as low as possible.

Embarking on an educational, information  
and awareness programme - to save energy.

3.6.3. Job losses due to shortage of  
production.

Business will make less profit - forced  
to close down.

Economic progress gets limited.

Economic & financial instability increases.

3.6.4. Increases costs as diesel is far  
more expensive than coal.

Burden on economy because diesel  
input will have to increase.

Financial pressure on households as  
food prices will increase.

## Question 4

4.1.1. L

4.1.2. E

4.1.3. A

4.1.4. B

4.1.5. K

4.1.6. J

4.1.7. C

4.1.8. I

4.2.1. False

4.2.2. False

4.2.3. False

4.2.4. True

4.2.5. True

4.2.6. True

4.2.7. False

4.3.1. Process by which people, ideas and economic activities are inter-connected globally.

4.3.2. Companies that operate across both national and international borders.

4.3.3. cheap imports, strikes, fake brands etc.

4.3.4. Cheap labour / Raw materials or factories are located for economic advantage.

4.3.5. High inflation levels. due to huge price hikes.

Trade conflict bet. countries when quotas implemented.

Job losses when factories close down.

Poverty in LEDC's.

Local industry declines due to no competitiveness.

4.4.1. They are considered as children in the eyes of the law.

4.4.2. Cannot open bank accounts.

Cannot apply for passports.

Cannot enter into any financial / other contracts.

Cannot get loan for farming, schooling, housing.

Cannot inherit property.

Land + housing cannot be registered in the

name of married women. (Any 3)

4.4.3. Women cannot contribute to the GDP.

No women owned businesses.

Hinders development with overseas countries.

4.4.4. Low education levels.

Women mainly involved in child bearing and rearing.

Traditional belief eg. 'women's place is at home.'

4.5.1. Cross-section through soil showing different layers.

4.5.2. Food is grown in this horizon.

Vegetation which provides  $O_2$  grows here.

4.5.3. Determines mineral composition of soil /

Determines the texture of the soil.

4.5.4. Allows for chemical weathering + determines texture of soil.

Increases leaching if there is a lot of water.

Results in calcification if evaporation rate is high.

Heavy rain leads to soil erosion.

Temp. determines humus content of soil.

Wind results in soil erosion. Sun influences rate of weathering.

(Any 2)



4.5.5. All layers are well-developed and clearly visible.

4.6.1. Energy produced by nuclear fusion from uranium.

4.6.2. Koeberg

4.6.3. Large coal reserves in SA.

Coal seams close to surface + easily obtained.

Relatively cheap to produce electricity.

4.6.4. Due to accident at Japan's Fukushima nuclear plant.

4.6.5. Agree

- Environmentally clean - no emissions of CO<sub>2</sub>.
- No global warming / acid rain.
- Nuclear energy is cheap + competitive with fossil fuel.
- Possible to generate a large amount of electricity in one single plant.
- Nuclear energy prices are stable.
- Uranium is plentiful.
- Nuclear energy is safe.

Disagree

- Storage + management of dangerous high-level radioactive waste.

High-level nuclear waste can last for 1000s of yrs. before being safe again.

- Possibility of explosion of nuclear materials.
- Potential terrorist threats.
- High cost of building nuclear facilities.
- Possibility of accidents.
- Long time frame needed for planning + building a new nuclear reactor.

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