ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY

PAPER 1 Multiple Choice

2248/1

JUNE 2008 SESSION

1 hour 15 minutes

1:50 000 Survey Map is enclosed with this question paper

Additional Materials:
- Multiple choice answer sheet
- Soft clean eraser
- Soft pencil (type B or HB is recommended)

TIME 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so by the invigilator.
Write your name, Centre number and candidate number on the answer sheet in the spaces provided unless this has already been done for you.

There are **forty** questions in this paper. Answer **all** questions. For each question there are four possible answers, **A, B, C,** and **D**. Choose the **one** you consider correct and record your choice in **soft pencil** on the separate answer sheet.
Read very carefully the instructions on the answer sheet.

INFORMATION FOR CANDIDATES

Each correct answer will score one mark.
A mark will not be deducted for a wrong answer.
Any rough working should be done in this booklet.

This question paper consists of 14 printed pages and 2 blank pages.

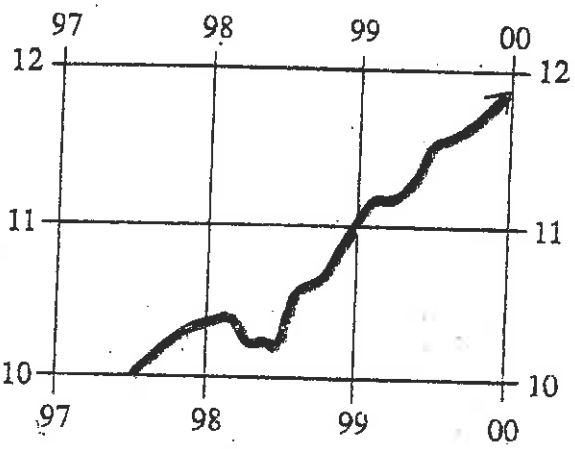
Mapwork

Questions 1 to 12 refer to the 1: 50 000 map of Muchirakuenda (Zimbabwe).

1 Which physical feature is found at Tsimenhurike (grid square 9000)?

A basin
B hill
C ridge
D saddle

2 The diagram shows part of the Ruya river.



Navigation is difficult along this part of the river because of

A rapids.
B rocks.
C sand banks.
D tributaries.

3 Which feature is located 4,6 km North-East of the trigonometrical station in grid sq 9200?

A dam
B dip tank
C spot height
D reservoir

we). 4 What is the length of the aerodrome landing area of Chombira which extends from grid square 9310 to grid square 9410?

A 0,8 km
B 0,9 km
C 1,0 km
D 1,1 km

5 Where is the confluence of the Mwananzou and the Ruya rivers located?

A 899 115
B 990 116
C 990 112
D 991 115

6 What is the grid bearing of the top of Gato hill in grid square 9700 from the trigonometrical station in grid square 9200?

A 32°
B 58°
C 93°
D 210°

7 In the area around Makore hill (grid square 0103), the main drainage pattern is

A dendritic.
B parallel.
C radial.
D rectangular.

8 What is the general direction of flow of the Ruya river?

n grid squ

A North-East to South-East
B South-East to North-West
C North-West to South-East
D South-West to North-East

9 What evidence suggests the presence of livestock farming in the area west of gridline 00?

A dip tanks
B good pasture
C paddocks
D sale pens

[Turn over

What is the most extensive landuse in grid square 9304?

A cattle rearing
B cultivation
C game ranching
D housing

A proposal is presented to build a new secondary school for the children in the area north of the river Ruya. Using map evidence only, which location would be the best?

A Nzvimbo (9210)
B Kanukamwe (8705)
C Muchirakuenda BC (9612)
D Muringai BC (9804)

Where does a gravel road cross the Ruya river without a bridge?

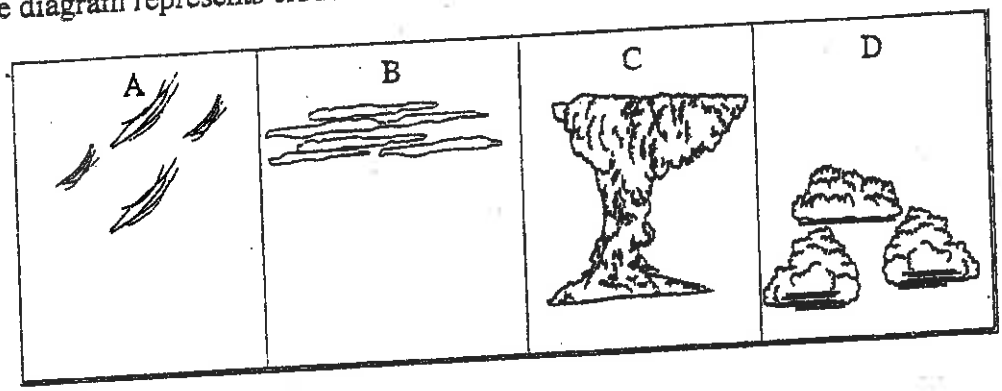
A 921 065
B 989 108
C 941 074
D 948 076

Physical Environment

Why does a Stevenson screen have louvred sides?

A to reflect heat
B to prevent heat from directly reaching the thermometers
C to allow free circulation of air
D to prevent ground heat from reaching the thermometers

The diagram represents cloud conditions at different stations.



3 Which of the cloud types **A**, **B**, **C** or **D** is associated with violent weather?

5 The following is a description of a weather feature: "an intense low pressure area which develops on the western margin of tropical oceans, accompanied by thunder, lightning and highly destructive winds".

What is this feature?

A inter-tropical convergence zone (ITCZ)
B tornado
C whirlwind
D tropical cyclone

16 The table below shows average temperature and rainfall for a place.

	J	F	M	A	M	J	J	A	S	O	N	D
Temp (°C)	25	27	27	27	27	26	25	24	25	26	26	26
Rainfall (mm)	60	60	130	145	190	200	109	79	173	180	94	76

Which type of climate is represented by the table?

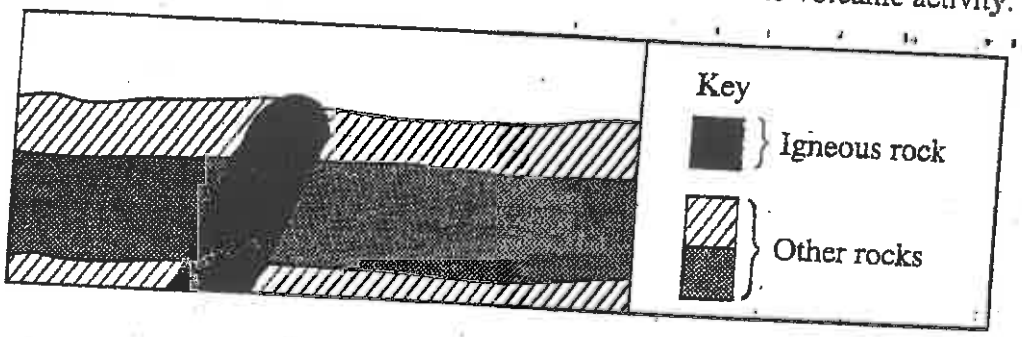
A Equatorial
B Hot desert
C Monsoon
D Tropical continental

[Turn over

17 Which weather condition is determined by pressure gradients?

A cloud cover
B rainfall amount
C relative humidity
D wind speed

18 The diagram shows an intrusive igneous feature formed due to volcanic activity.



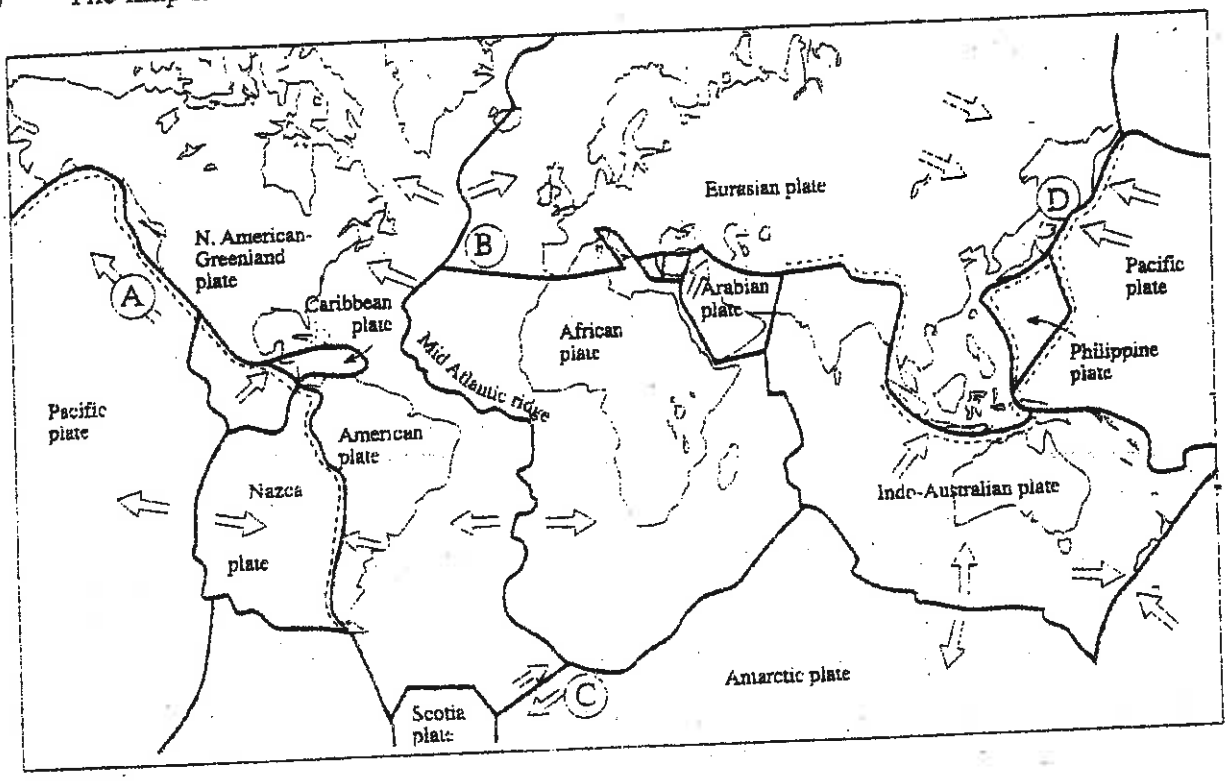
The feature is a

A batholith.
B dyke.
C lopolith.
D sill.

19 Which mountain was formed as a result of folding?

A Alps
B Kilimanjaro
C Ruwenzori
D Vesuvius

20 The map shows the Earth's crustal plates.

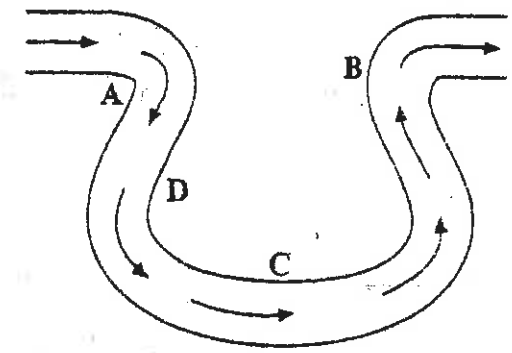


At which plate boundary **A**, **B**, **C** or **D** does seafloor spreading occur?

21 Which process of chemical weathering involves the absorption of water by rock minerals without changing their chemical structure?

A carbonation
B hydration
C oxidation
D solution

22 The diagram shows a meandering river pattern.



→ direction of flow

At which location **A**, **B**, **C**, or **D** does erosion occur?

23 Which process of river erosion is mainly responsible for the formation of a plunge pool a waterfall?

A abrasion
B attrition
C corrosion
D hydraulic action

24 What is the name of a desert feature which sometimes carries salty water?

A bahada
B pediment
C playa
D wadi

25 Which is the main input in land-based ecosystems?

A animals
B vegetation
C sunlight
D decomposers

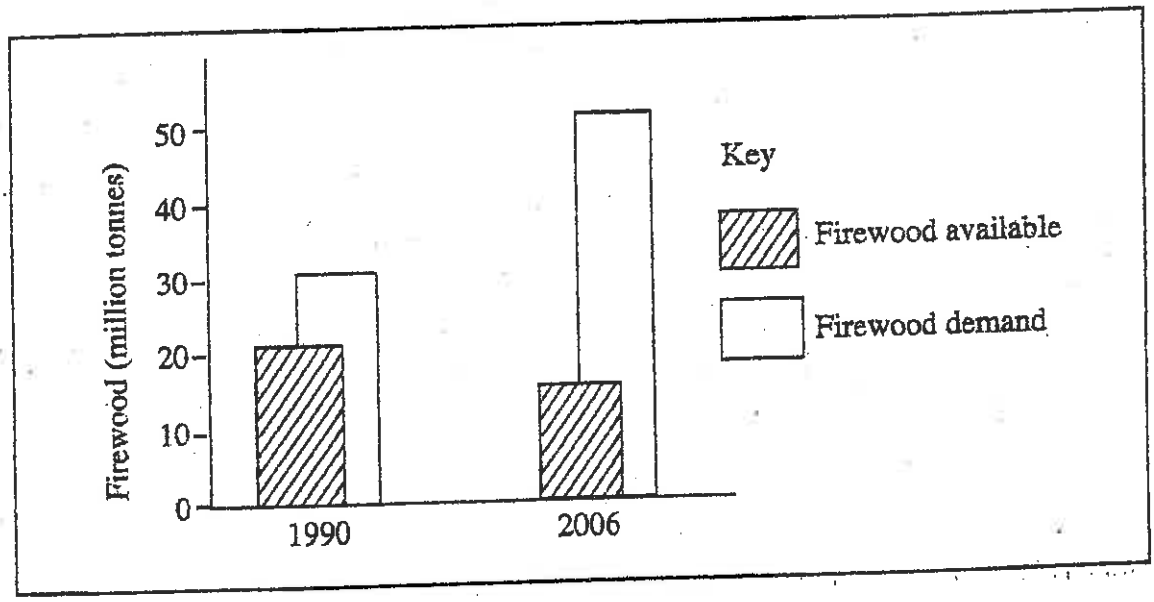
9

Economic Geography

Which of the following is a non-renewable and a renewable resource respectively?

	non-renewable	renewable
A	fish	coal
B	oil	cow
C	vegetation	copper
D	water	wind

The diagram below shows the firewood problem of a developing country.



The country would deal with this problem by

A importing nuclear energy.
B introducing fuel-saving devices.
C prospecting for more fossil fuels.
D resettling rural people.

28 Which would be the most suitable land rehabilitation scheme in a semi-arid area wh experienced severe environmental degradation?

A application of fertilizer to increase agricultural yields
B creation of rotational grazing schemes
C eradication of tsetse fly
D improvement of veterinary services to control animal diseases

29 Why are most dairy farms located near urban centres?

A availability of a large market
B availability of a large labour force
C availability of clean water
D availability of special dairy cattle feeds

30 Which type of farming system is most suitable for an area with the physical conditio shown in the table below?

Climate	Soil	Relief
temp. 25° – 28 °C annual rainfall – 1800 – 2500 mm	deep, well drained e.g. volcanic alluvial or weathered limestone	level lowland below 1200 m

A cooperative dairy farming
B large-scale cattle ranching
C large-scale sugar cane plantation
D apple fruit growing

31 The table below shows the percentages of the working population employed in prim secondary and tertiary activities for four countries.

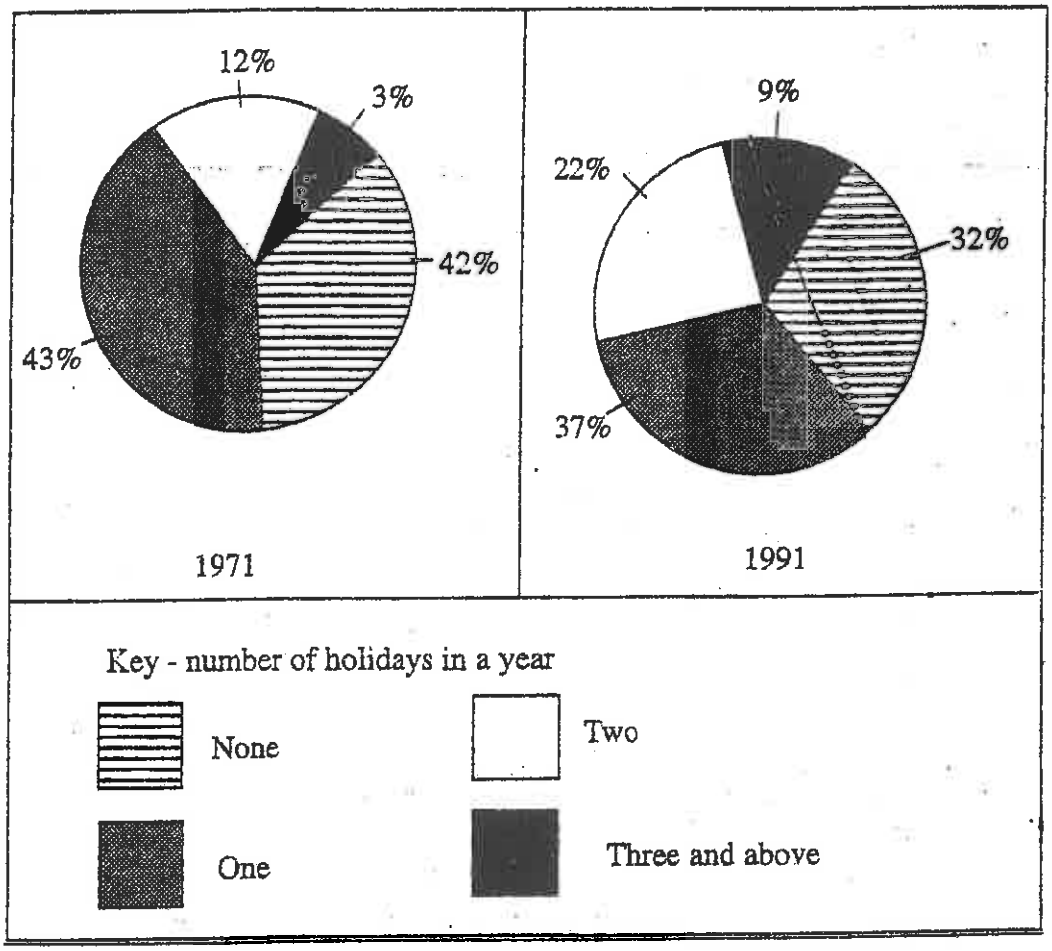
Country	Primary	Secondary	Tertiary
A	3	26	71
B	7	34	59
C	32	24	44
D	70	10	20

Which country A, B, C or D is the most economically developed?

32 Which one of the following industries is raw-material based?

A sugar milling in Triangle
B car assembly industry in Mutare
C furniture making in Harare
D sugar refining in Bulawayo

33 The pie charts below show the number of holidays taken in a year in a certain country.



Which category experienced the least percentage increase between 1971 and 1991?

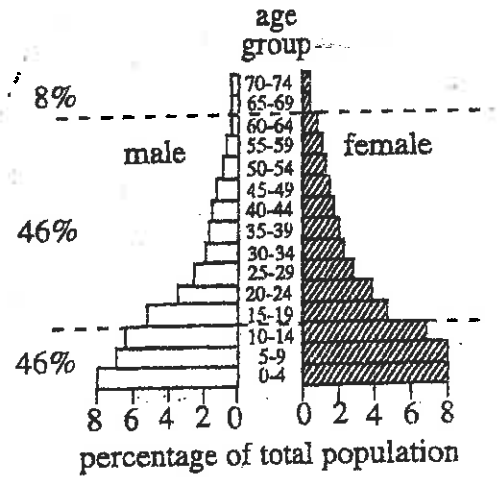
A none
B one
C two
D three and above

Population, Settlement and Trade

34 The term *underpopulation* means

A fast depletion of resources.
B too few people for the available resources.
C too many people for the available resources.
D resources and population balancing.

35 Study the age-sex graph below.



What is the percentage dependent population for the graph shown?

A 8%
B 46%
C 54%
D 92%

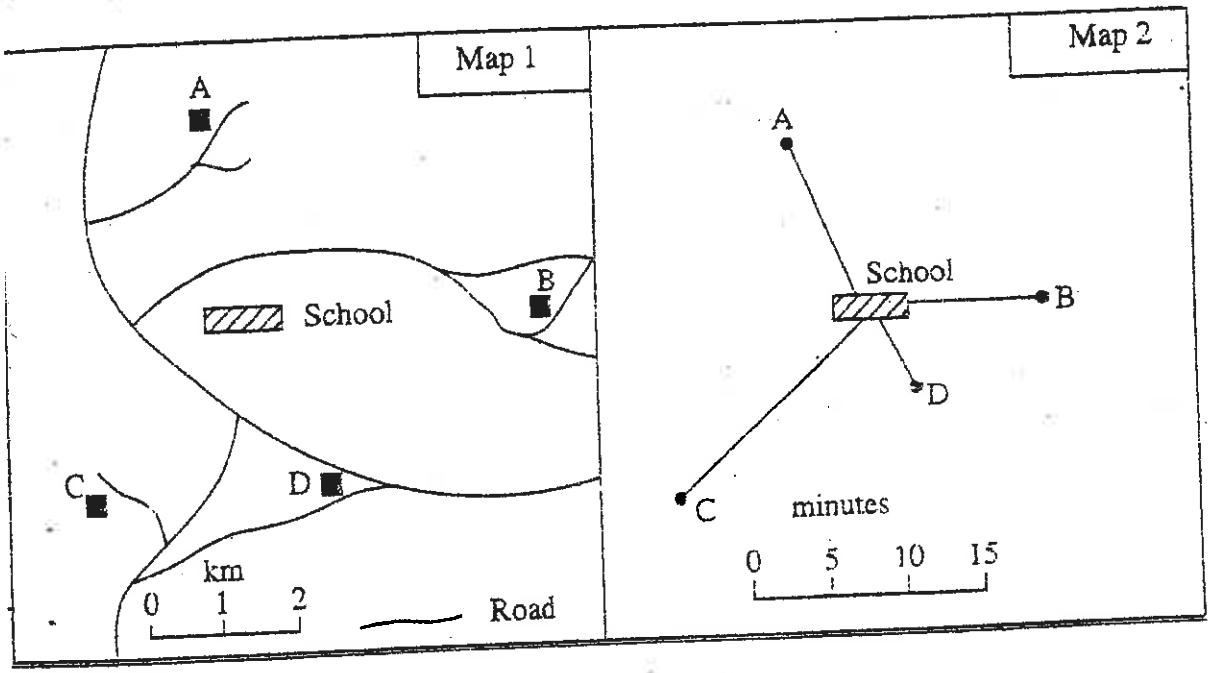
36 One of the aims of the clean-up operation of illegal settlements by the Zimbabwean government in 2005 was to reduce the spread of

A cholera.
B HIV/AIDS.
C kwashiorkor.
D malaria.

In urban housing, the terms *high density* and *low density* refer to the

A quality of life of the residents.
B number of houses per unit area.
C number of people per unit area.
D quality of building materials.

Map 1 shows the location of the homes for four pupils in relation to their school. Map 2 shows the time taken by each pupil to travel to school.



Which pupil, A, B, C or D has the poorest transport link with the school?

ıbwean

The table below shows trade between country X and four trading partners.

	Exports	Imports
A	40%	48%
B	3%	12%
C	38%	25%
D	17%	2%

With which of the trading partners A, B, C or D did the country have the most favourable balance of trade?

40 What is the local time in New York, longitude 75° West, when it is noon in Harare, longitude 30° East?

A 0500 hours (5 a.m)
B 0700 hours (7 a.m)
C 1700 hours (5 p.m)
D 1900 hours (7 p.m)

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY 2248/1

in Harare,

MARKING SCHEME JUNE 2008

1	B
2	A
3	C
4	D
5	C
6	C
7	C
8	D
9	A
10	D
11	A
12	B
13	C
14	C
15	D
16	A
17	D
18	B
19	A
20	B
21	B
22	B
23	D
24	C
25	C
26	B
27	B
28	B
29	A
30	C
31	A
32	A
33	D
34	B
35	C
36	A
37	B
38	C
39	D
40	A

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY

2248/2

PAPER 2

JUNE 2008 SESSION

2 hours 30 minutes

Additional materials:
Answer paper

TIME 2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.
Answer **four** questions.
Answer **one** question from each of Sections A, B and C and **one** other question from any section.
Write your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

This question paper consists of 12 printed pages.

[Turn over

Section A (Physical Environment)

Answer at least **one** question from this section.

1 (a) Fig. 1 shows the major world plate boundaries.

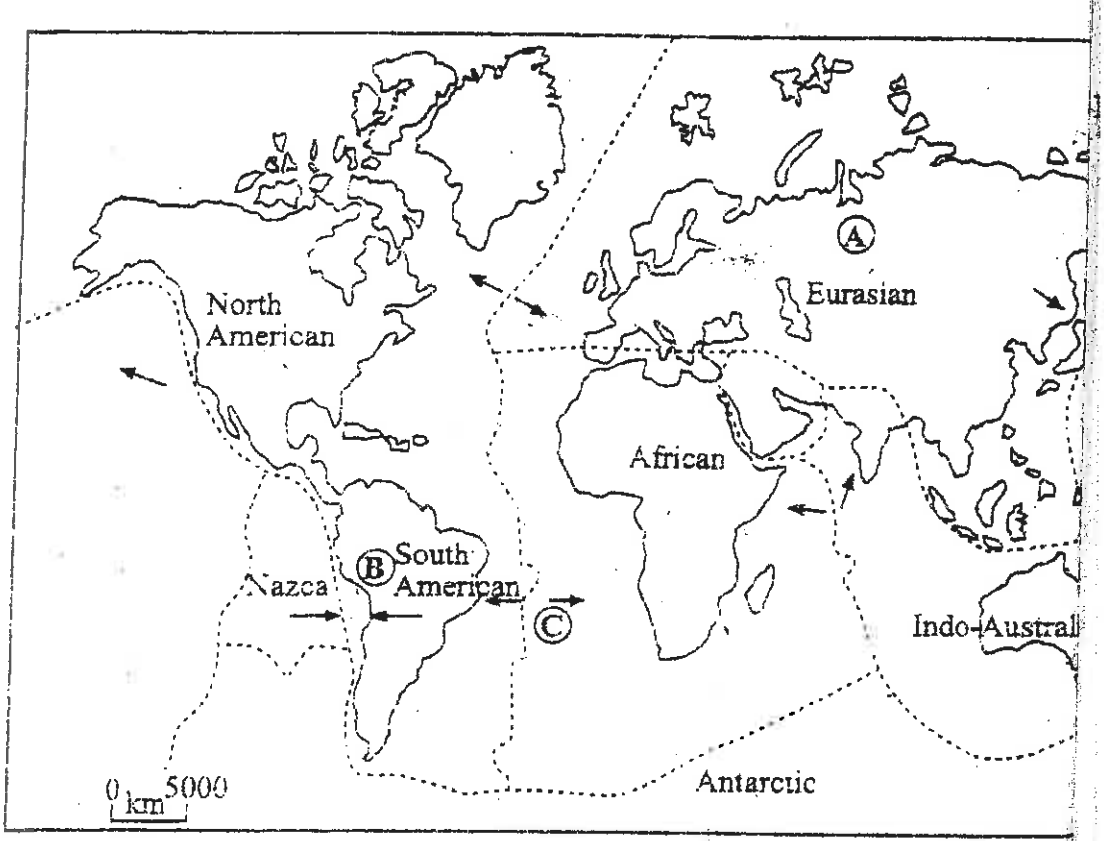


Fig. 1

(i) Identify **one** destructive and **one** constructive plate boundary.

(ii) With the help of examples, describe the dangers of living nea plate boundary.

(iii) Suggest measures you would take to assist people affected b destructive plate boundary.

(b) Fig. 2 shows changes in the volume of water in a river in Zimbabwe.

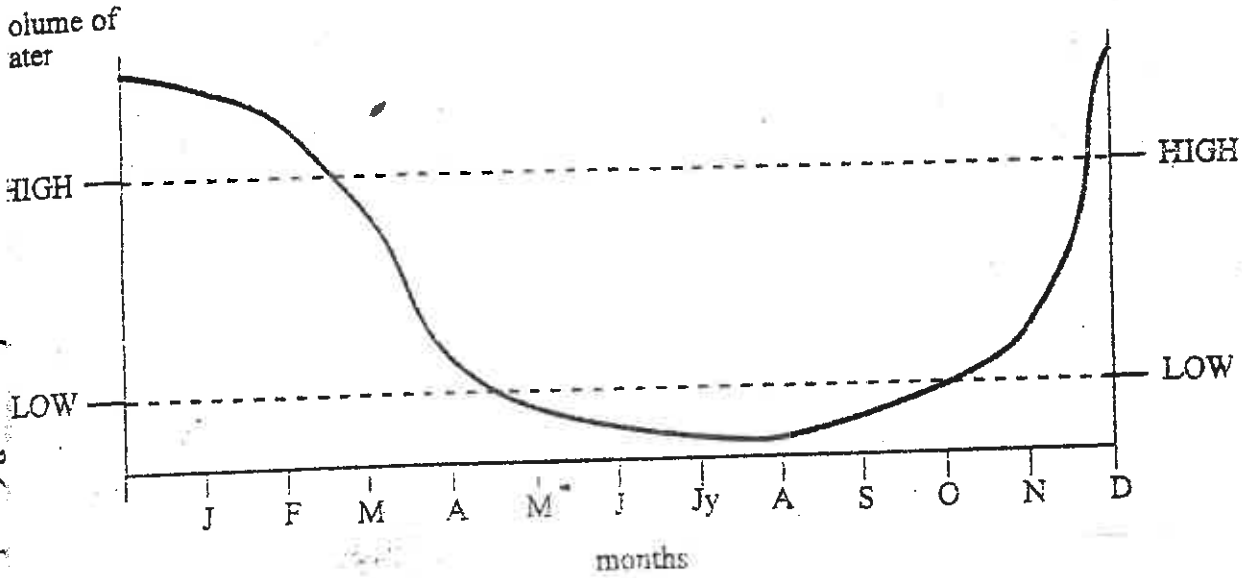


Fig. 2

(i) Describe and explain the changes shown. [7]

(ii) How do the changes shown affect river processes? [3]

(c) Fig. 3 shows the course of a river.

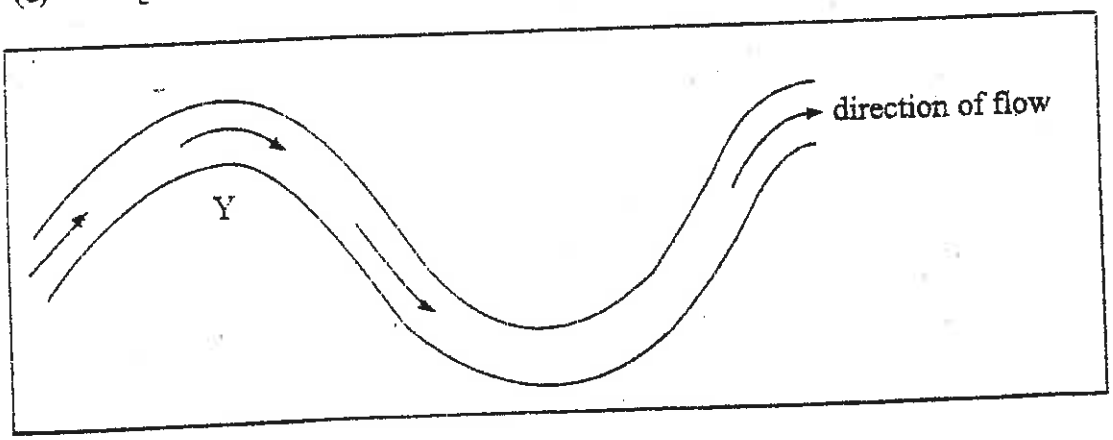


Fig. 3

Name the river shape shown and the bank marked Y. [2]

2 (a) Fig. 4 shows a weather instrument.

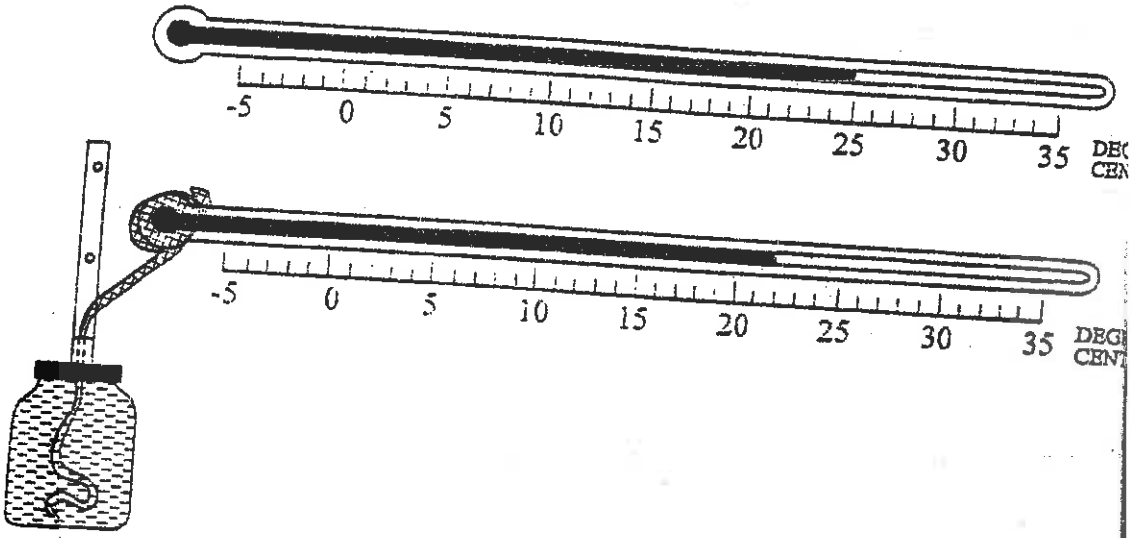


Fig. 4

(i) Name the instrument shown and the weather element it measures.

(ii) Describe how the instrument works.

(iii) What precaution should be taken to obtain accurate readings from the instrument?

(b) (i) Draw a labelled diagram to show the formation of convectional rainfall.

(ii) Outline the hazards associated with convectional rainfall.

(iii) As a meteorological officer, what measures would you take to minimise the hazards of convectional rainfall and what problems would you encounter in the process?

(a) Photograph A shows an environmental problem.

Photograph A

(i) Identify the problem and explain its likely causes. [5]

(ii) What measures can you take to solve the problem shown in the photograph? [7]

(b) Fig.5 shows biomass in different ecosystems in Africa.

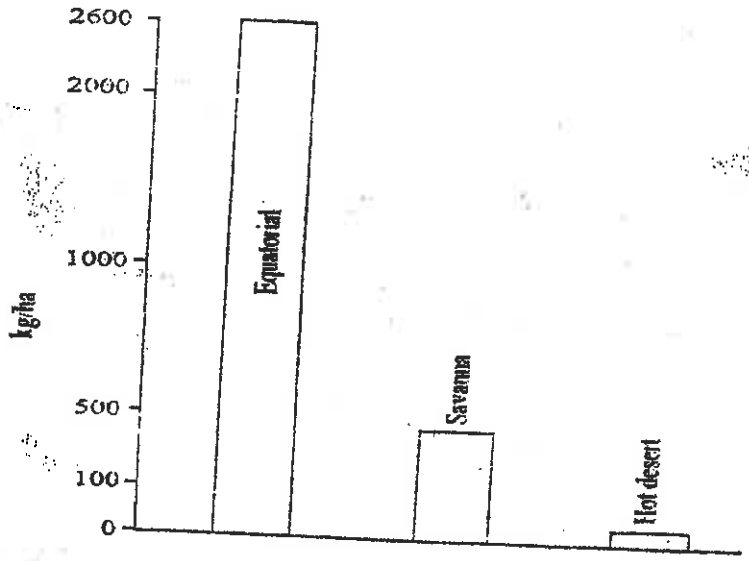


Fig. 5

Describe and explain the differences shown.

(c) With the help of examples, describe the main causes of land pollution in Zimbabwe.

Section B (Economic Geography)

Answer at least **one** question from this section.

4 (a) (i) List any **three** sources from which electricity is generated in Zimbabwe.

(ii) Describe the generation of electricity from water.

(iii) What do you consider to be the benefits and problems associated with water-generated electricity in Zimbabwe?

(b) Table 1 shows freshwater (inland) fish production in selected SADC countries.

Table 1

Country	Average production (tonnes)
Angola	7 000
Botswana	1 400
Lesotho	22
Malawi	72 000
Mozambique	1 500
Namibia	150
Swaziland	106
Zambia	67 000
Zimbabwe	14 000
South Africa	6 000
Tanzania	216 000

(i) For South Africa, Zambia and Zimbabwe, draw a pie chart to show their catches given in Table 1. [4]

(ii) Describe and explain the variations in fish production shown in the table. [7]

5 **(a)** Many urban dwellers in Africa have of late been involved in urban agriculture.

(i) Outline the main features of urban agriculture. [3]

(ii) Explain the recent rise in urban agriculture in Africa. [4]

(iii) What environmental and social problems are likely to be faced as a result of urban cultivation? [7]

(b) Fig. 6 shows three methods (X , Y and Z) used to conserve agricultural resources.

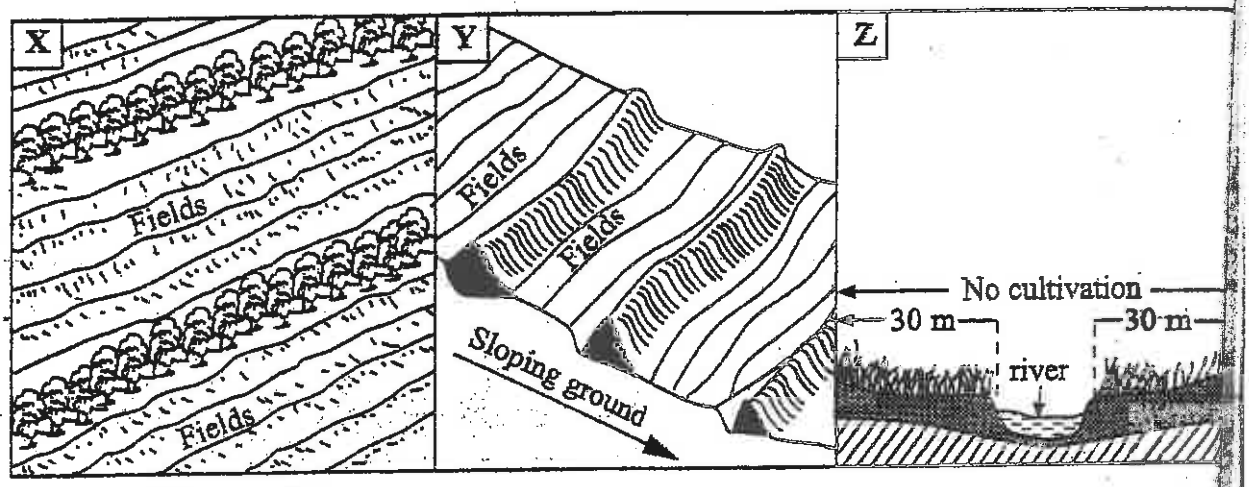


Fig. 6

(i) Name the method used at each of X, Y and Z. [3]

(ii) Describe how each of these conservation methods works. [8]

6 (a) (i) Explain the term 'processing industry'. [2]

(ii) For a named processing industry you have studied, draw a labelled sketch map to show the factors that influenced its location. [7]

(b) (i) What is industrial relocation? [2]

(ii) As an industrialist, what arguments would you put forward for and against the relocation of industry? [7]

(c) Fig. 7 is a cartoon showing conflict in landuse in a rural area in Zimbabwe.

Fig. 7

(i) Name **two** areas in Zimbabwe where such a conflict occurs. [2]

(ii) Describe the landuse conflict shown in the cartoon and suggest how it can be solved. [5]

Section C (Population, Settlement, Transport and Trade)

Answer at least **one** question from this section.

7 (a) (i) Describe the factors leading to the development of nucleated rural settlements. [4]

(ii) If you were a Rural Development Planner, what points would you raise to convince locals in a haphazard settlement on the need for planned resettlement? [4]

(b) Fig.8 shows two different types of housing found in a town in Zimbabwe.

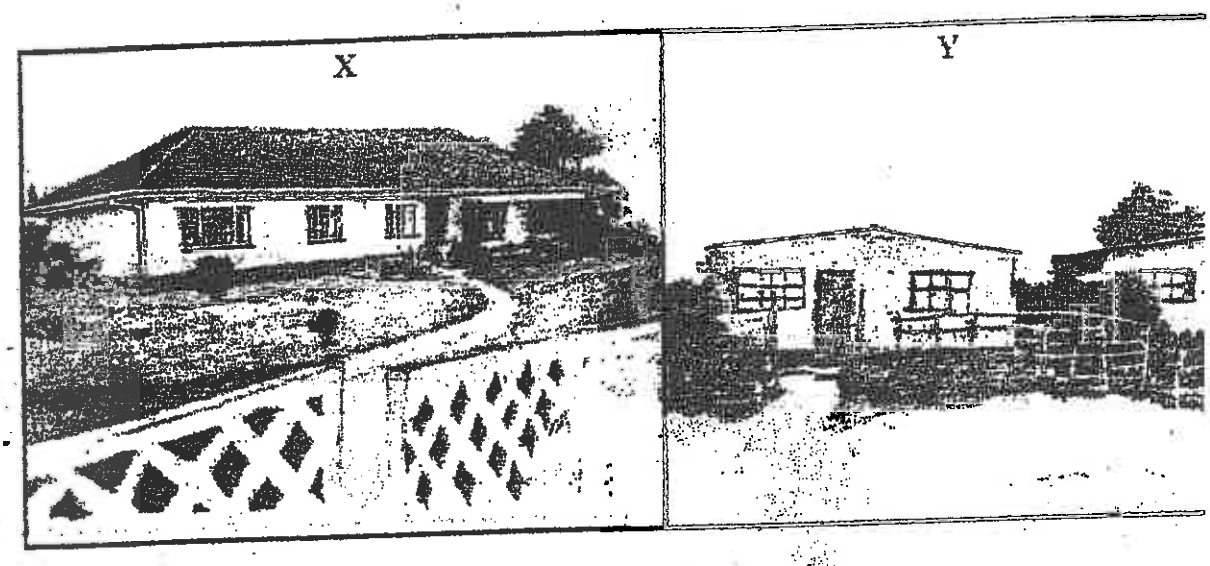


Fig. 8

(i) Describe and explain the differences between the two types of housing shown. [

(ii) With reference to an example, explain the urban problems faced by residents of housing type Y and suggest solutions to these problems. [

(iii) What problems are likely to be encountered in implementing the solutions suggested in b(ii) above? [

(iv) Identify and explain one problem commonly faced by residents in housing type X. [

8 (a) (i) State any **three** methods used to collect population data. [3]

Table 2 shows percentage distribution of population in Zimbabwe (1992).

Table 2

Province	Urban	Rural	Total
Manicaland	11,45	88,55	100
Mashonaland Central	8,05	91,95	100
Mashonaland East	6,01	93,99	100
Mashonaland West	24,20	75,80	100
Matabeleland North	11,68	88,32	100
Matabeleland South	8,11	91,89	100
Midlands	23,14	76,86	100
Masvingo	8,18	91,82	100
Harare	98,55	1,45	100
Bulawayo	100,00	-	100

(ii) Describe the distribution shown in Table 2. [5]

(ii) Draw a bar graph to represent the urban population shown in Table 2, **excluding** Harare and Bulawayo. [6]

(b) What evidence indicates that there is overpopulation in the communal areas of Zimbabwe? [4]

(c) As a population resource officer, what arguments would you give for and against the migration of people across international boundaries? [7]

9 **(a)** **(i)** Define the term 'protectionism' with reference to trade. [2]

(ii) What evidence indicates that there is protectionism in Zimbabwe? [5]

(iii) Suggest **two** advantages of trade liberalisation. [2]

(b) Fig. 9 shows the nature of imports and exports for a country.

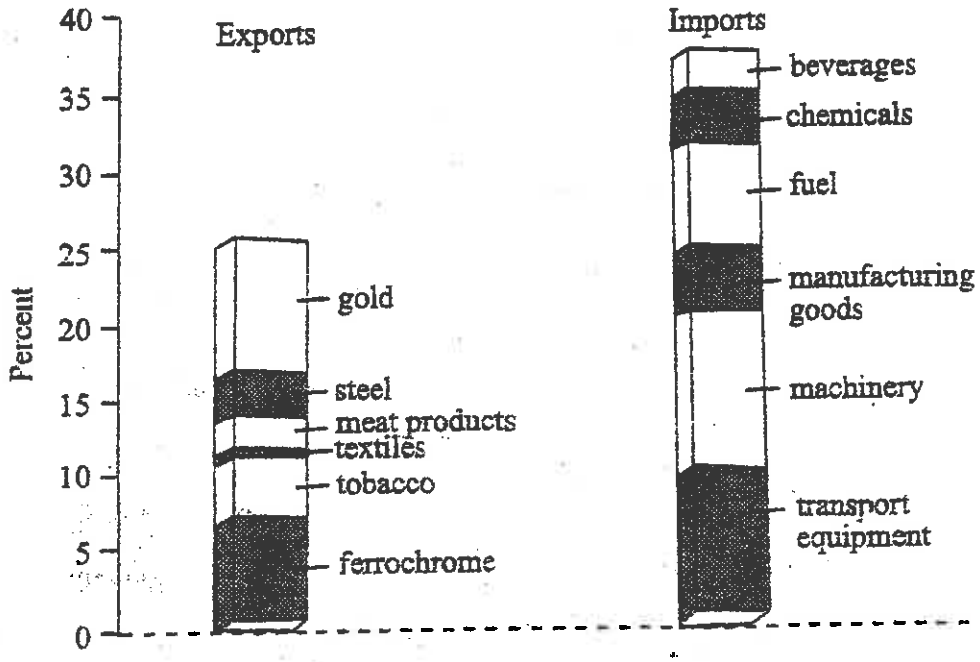


Fig. 9

(i) Describe the nature of the country's trade. [6]

(ii) Outline the disadvantages of this type of trade. [5]

(iii) How can this country create a favourable balance of trade? [5]

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

[2]

we? [5]

[2]

POSSIBLE ANSWERS

ng

JUNE 2008

[6]

[5]

[5]

GEOGRAPHY **2248/2**

1 (a) (i) Constructive boundary

- between Eurasian and North American plates
- between African and South American plates
- between African and Indo-Australian plates

Destructive boundary

- between and Nazca and South American plates
- between the Eurasian and Pacific plates

1 mark each (2)

(ii) Examples: - Nyamlagira, Mount Vesuvius
Pina Tubo, Mount Saint Helens [volcanoes]

Earthquakes - Indonesia; Algeria (1989);
- Mozambique (2006)

- death of people
- destruction of buildings
- destruction of crops
- homelessness
- cutting off of electricity and telephone services
- outbreak of electric fires
- floods
- hot lava flows
- displacement of communication lines e.g. roads and railways
- shortage of drinking water
- shock
- pollution
- poor visibility
- diseases
- shortage of food

1 mark each danger. ½ for examples to a max of 2. (7)

(iii)
- early warning systems/use sirens
- movement to safer areas/evacuation
- reinforced buildings
- education
- drills for faster evacuation of buildings
- wide streets which cannot easily be blocked by rubble
- lava dams
- underground bunkers
- counselling
- provision of food, fresh water, clothing, medicines and shelter

1 mark each (4) [13]

(b) (i)
- High volume from December to March – rainy season
- Low volume from April – September - dry season
- Rapid decrease (March – April) – end of rainy season
- Gradual increase (August – November) – beginning of rainy season
- Rapid increase (November – December) – Increase in rainfall

1 mark each. Refer to graph
Reserve 3 for D/E (7)

(ii) During high volume period erosion and transport processes are high - large volumes and sizes of load are transport
During period of decrease in volume, small quantities of load are transported and rate of erosion is low.
During low volume period, deposition will be on the increase. (3)
1 mark each

(c) Shape – meander
Bank – convex/slip off slope (2) [12]
[25]

1 mark each

2 (a) (i)
- Instrument - hygrometer/wet and dry bulb thermometer
- Element - humidity/water vapour content

1 mark each (2)

(ii) When dry
- the water sucked/absorbed by the muslin also evaporates
- this cools the wet bulb thermometer, lowering its temperature
- the dry bulb is not affected
- T° differences are large

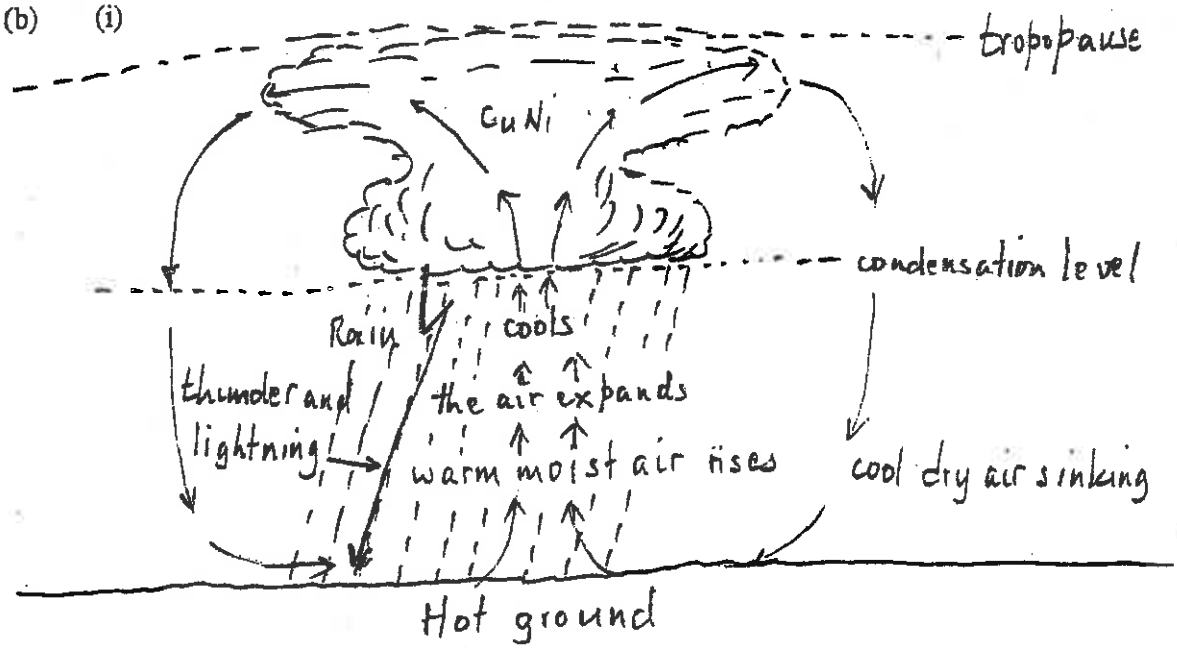
When humid
- evaporation is reduced on the wet bulb
- its T° will be slightly lower than the dry bulb/small difference between the two bulbs

When saturated- there is no differences between the two bulbs

1 mark each (6)

(iii) Place it in the Stevenson screen.
Regularly refilling the container with distilled water. (1) [9]

(b) (i)



Mark by ½ for each label [5]

(ii) Hazards

Lighting (fires, deaths), flooding, strong winds, landsides, destruction of homes, crops, property etc.

1 mark each [4]

(iii) Measures:

- lighting conductors, early warning systems, education, cloud dissipation, afforestation/reforestation, raising river banks, resettlement/evacuation, settling on higher ground, constructing storm drains, storm abortion.

Problems:

- ignorance, lack of co-operation, remoteness of settlements, capital and machinery, manpower, inaccessibility, etc

1 mark each. Reserve 3 for M/P (7) [16]

[25]

3 (a) (i) Problem: - Environmental degradation/deforestation/soil erosion
- Overgrazed ecosystem

Causes:
- Overstocking
- Forest clearance
- Burning of veld
- Overpopulation
- Drought

1 mark each
Reserve 1 mark for problem (5)

(ii) Measures
- Afforestation
- Reforestation
- Destocking
- Paddocking
- Regrassing with vetiver grass
- Population control
- Resettlement
- Irrigation
- Education
- Legislation

1 mark each (7) [12]

(b)
- Equatorial has largest biomass (about 2600 kg/ha) due to large biodiversity, high rainfall, high temperatures, a lot of litter.
- Savannah is second highest (about 500 kg/ha) due to seasonal rainfall/ dry winters and moderately high temperatures.
- Desert has the least (about 40-50kg/ha) because of absence of rainfall, scanty vegetation and absence of litter.

1 mark each
Reserve 2 for D/E (6) [6]

(c)
- Domestic and industrial waste
- Uncollected refuse by city councils
- Lack of proper dumping places in urban areas
- Lack of planning by city fathers
- Lack of supply of bins
- Weak environmental policies
- Low fines for dumping refuse
- Uncontrolled vending
- Lack of diesel

E.g. Chitungwiza City Council

1 mark each (7) [7]
Res 2 for examples. [25]

4 (a) (i) - water, coal, diesel, crop residues or baggase, sun.

1 mark each. Any 3 (3)

(ii)
- water drops from a large head by gravity
- it flows through penstocks to turbines
- the force of the water turns turbines
- the turning turbines move generators
- the generators produce electricity

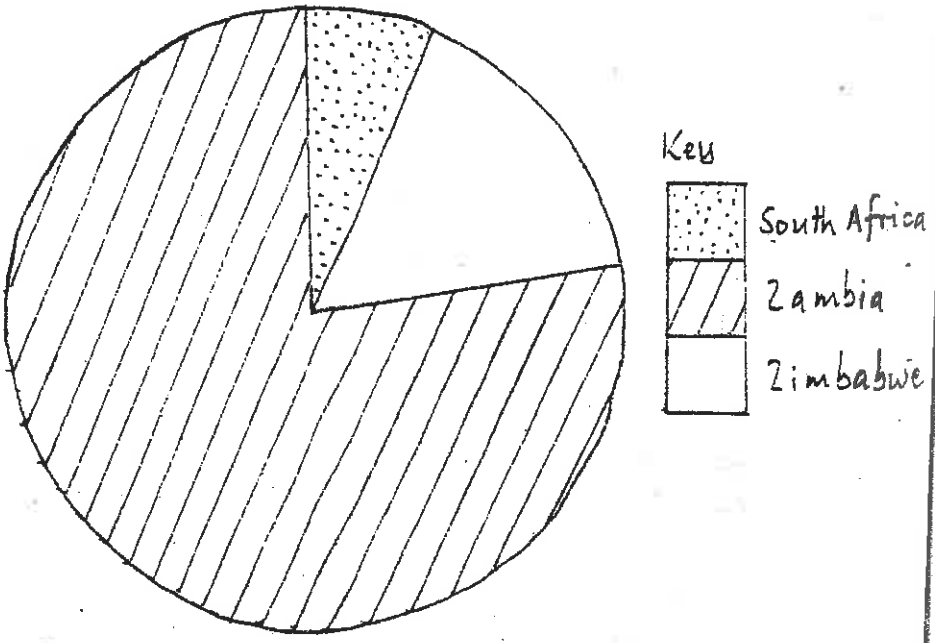
1 mark each (4)

(iii)

Benefits	Problems
- renewable	- drought lowers production
- clean	- seasonal variations in water volume
- cheap	- small rivers
- multi-purpose	- sharing basins with other countries
	- initial cost of construction is high
	- relocation/resettlement of people

1 mark each. Reserve 3 for B/P (7)[14]

(b) (i)



1 mark each for each segment, labels or key (4)

(ii)

Descriptions	Explanations
- Tanzania has largest catch	- these have large inland lakes and rivers
- Malawi is second	
- Zambia is third	- long tradition of fishing (fish main diet of communities)
- Zimbabwe, Angola and South Africa have low volumes	- few large perennial rivers - no natural lakes
- Lesotho, Swaziland have lowest catches	- small populations (markets) - few or no lakes and large rivers
- Namibia has low catches	- depend on ocean catches

1 mark each, Reserve 3 for D/E. (7) [11]

[25]

5 (a) (i)
- market gardening
- subsistence production
- subsistence maize, sweet potato, vegetable production
- poultry, rabbit production, piggery
- intensive production
- mixed farming
- small scale

1 mark each (3)

(ii)
- unemployment
- food shortage
- poverty
- high food prices
- relaxation of council by-laws

1 mark each (4)

(iii) increased erosion
- siltation of rivers and dams
- destruction of green belts
- increased dust levels (air pollution)
- eutrophication of water sources
- loss of natural beauty
- theft
- conflicts
- land pollution from litter

(7) [14]

(b) (i) 1 mark each
- X - windbreak
- Y - contour ridging/ploughing
- Z - legislation

1 mark each (3)

(ii)
- X trees act as wind break and prevent wind and water erosion
- Y contour ridging increases infiltration and reduces surface runoff
  Prevents washing away of soil nutrients

Z cultivation 30 metres away from the river prevents washing of soils into rivers and reduces siltation of rivers and dams (3,3,2) (8) [11]

[25]

6 (a) (i) Industries concerned with preparing raw materials for use or for further manufacture/extraction or removal of impurities from raw materials or ores (2)

(ii) Name 1 mark

Factors
- markets, labour
- transport, water supply
- raw material supply

} max. of 2 per factor

Examples
- Kadoma Textile Industry
- Sugar Refinery
- Wood Pulp Industry (7) [9]

(b) (i) When the industry/industries move from its original location to a new one (2)

(ii) For

- to promote economic development in depressed areas
- decentralisation of industry
- employment creation
- provision of social services
- infrastructure development
- development of other industries

Against

- unemployment
- loss of revenue
- under utilization of social amenities/infrastructure decay
- migration of skilled and youthful population
- general economic depression in old industrial areas
- ghost towns etc

1 mark each
Reserve 3 for F/A (7) [9]

(c) (i) Gonarezhou National Park; Chewore N.P, Hwange National Park, Matetsi Game Reserve, areas around National Parks, CAMPFIRE areas, etc

1 mark each (2)

(ii) Description: Villager wants the elephant removed because it destroys vegetation, and huts. The tourist wants the elephant to remain in the area to watch or photograph it.

Solutions
- Relocate the elephant and the tourist
- Resettle the villager elsewhere
- Fence the area to separate the two land uses
- culling
- set up CAMPFIRE

1 mark each (5) [7]
Reserve 2 D/S [25]

7 (a) (i)
- water shortage leads to clustering around water source
- presence of a resource base e.g. irrigation
- fertile soils
- defensive points
- nodal points
- cross roads areas/points etc
- flat land in a mountanous area
- government policy/legislation
- social/cultural, e.g. around a chief

1 mark each (4)

(ii) - Easier provision of
- transport
- electricity
- water
- schools
- clinics
- irrigation

- Allows for equitable distribution of arable land.

(b) (i) 1 mark each (4) [8]

X	Y	Explanations
big house	small house	affordability and status symbols
big yards	small yards	affordability and status symbols
gutters	no gutters	affordability
different designs of houses	uniform design of houses	individual taste for X
houses under tiles	houses under asbestos	for beauty and durability
big windows	small window	for beauty, more light
durawalled	wooden fenced	security and privacy for X

1 mark each (6)
Res. 2 D/E

(ii) Examples: Mbare, Sakubva, Mkoba, Makokoba etc.

Problems:
- Overcrowding
- Noise pollution
- Illegal structures
- Land pollution
- Shortage of water
- Sewage bursting
- High crime rate
- High levels of unemployment
- Drug abuse
- Pressure on schools and clinics
- prostitution
- disease, etc

Solutions:
- clean up operations
- efficient refuse collection
- legislation
- more police patrols
- overhauling sewage systems
- new schools and clinics
- education on family planning
- improve quality of life in rural areas etc
- resettlement

1 mark each example. 1 mark each Res 2 for P/S (7)

(iii) Problems:
- Shortage of funds
- Shortage of fuel
- Weak environmental laws
- High birth rate
- High rural-urban migration
- Corruption
- Misappropriation of funds

1 mark each (2)

(iv) Problems:
- Theft/burglary
- Carjacking
- Murder

Explanation: - The residents are targets mainly because they have high incomes, large homes and many and beautiful cars, well furnished homes

1 mark each (2) [17]
Res 1 P/E [25]

8 (a) (i)
- Population census
- Vital registration system e.g. from schools, hospitals, parishes,
- Sample surveys

1 mark each (3)

(ii)
- Bulawayo has the largest percentage in the urban area which is hundred percent and with zero in the rural areas, followed by Harare which has the second lowest percentage in the rural areas.
- Mashonaland East has the largest percentage in the rural areas.
- Mashonaland East has the smallest percentage of population in the urban areas. etc

1 mark each
Refer to table. (5)

(iii) Bar graph

½ mark for scale
½ mark for name of province
½ mark for correct bar
NB: Wrong or no scale = no mark.

(6) [14]

(b)
- shortage of land for agriculture
- declining yields
- evidence of land degradation, e.g. soil erosion
- the use of marginal land/areas which cannot support sustained agriculture
- lack of adequate grazing land
- exodus of people from rural areas into towns
- disappearance of the natural woodland
- starving animals
- high incidence of disease

1 mark each (4) [4]

(c) <u>For</u>

- importation of knowledge and skills/technology
- generation of foreign currency when people overseas send money home
- importation of foreign goods which could be better than local goods
- creation of job opportunities.

<u>Against</u>

- xenophobia
- brings about "brain drain" or less of skilled workers
- local goods become expensive since prices can be determined by people overseas
- importation of foreign cultures
- family ties are broken
- decrease in production/underutilisation of resources.

1 mark each
Reserve 3 for F/A

(7) [7]

[25]

9 (a) (i) These are methods used to protect a country's economic interests (2)

(ii)
- use of tariffs to discourage the importation of goods into the country
- allocation of quotas to control the quantities of imports coming into the country
- offering subsidies e.g. tax concession to encourage exports

1 mark method; 1 mark explanation (5)

(iii)
- limited trade restrictions
- more trade partners
- more goods
- trade relations improve
- more foreign currency
- xenophobia
- decrease in production/under utilisation of resources

1 mark each (2) [9]

(b) (i)
- more import/less exports
- exports mostly raw materials
- imports mostly processed goods
- highest import is machinery and lowest is beverages
- highest export is gold and the least is textiles
- ferrochrome is the second highest export
- transport of equipment is the second highest import

1 mark each point
Refer to graph (6)

(ii)
- negative, adverse or unfavourable balance of trade
- exports are of low value – primary goods
- imports expensive, high value
- shortage of foreign currency
- low prices of exports determined at international commodity market
- prices of primary goods always fluctuating because of flooded markets
- prices of manufactured goods always rising
- competition from other countries selling primary goods

1 mark each (5)

(iii)
- reduction of dependence on the export of unprocessed primary raw materials
- exports of processed goods/beneficiation of primary products
- diversification into new high quality and competitive products
- minimisation of costs of production by purchasing high technology machinery
- use of tariffs to discourage the importation of goods into the country
- allocation of quotas to control the quantities of imports coming
- offering of subsidies e.g. tax concession to encourage exports [16]

1 mark each (5) **[25]**

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY

PAPER 1 Multiple Choice

2248/1

NOVEMBER 2008 SESSION

1 hour 15 minutes

1:50 000 Survey Map is enclosed with this question paper

Additional Materials:
- Multiple choice answer sheet
- Soft clean eraser
- Soft pencil (type B or HB is recommended)

TIME 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so by the invigilator.
Write your name, Centre number and candidate number on the answer sheet in the spaces provided unless this has already been done for you.

There are **forty** questions in this paper. Answer **all** questions. For each question there are four possible answers, **A**, **B**, C and **D**. Choose the **one** you consider correct and record your choice in **soft pencil** on the separate answer sheet.
Read very carefully the instructions on the answer sheet.

INFORMATION FOR CANDIDATES

Each correct answer will score one mark.
A mark will **not** be deducted for a wrong answer.
Any rough working should be done in this booklet.

This question paper consists of 20 printed pages.

[Turn over

Mapwork

Questions 1 to 12 refer to the 1:50 000 map of Mapeta, Zimbabwe.

1 What is the drainage characteristic of both the Deka and Matetsi rivers?

A meandering
B ox-bow lakes
C gorge sections
D distributaries

2 The direction of flow of the Deka river is

A North East.
B North West.
C South East.
D South West.

3 What is the approximate area of cultivated land in grid square 5890?

A 2 km^2
B 1,5 km^2
C 1 km^2
D 0,5 km^2

4 The six-figure grid reference for Mwemba Dip is

A 540880.
B 541896.
C 896541.
D 880540.

5 Which of the following grid squares has the steepest slopes?

A 5783
B 5683
C 5583
D 5483

6 The physical feature in the north east corner of the map between Eastings 56 and 60 is a

A gorge.
B ridge.
C plain.
D plateau.

7 The bearing of .610 in grid square 5884 from .608 in grid square 5689 is

A 55°.
B 155°.
C 180°.
D 275°.

8 All of the following are reasons for the location of Chief Wange's home in grid square 5389 **except** nearness to

A powerline.
B. road.
C water.
D people.

9 The settlement pattern made by huts in grid square 5797 is

A linear.
B scattered.
C rectangular.
D circular.

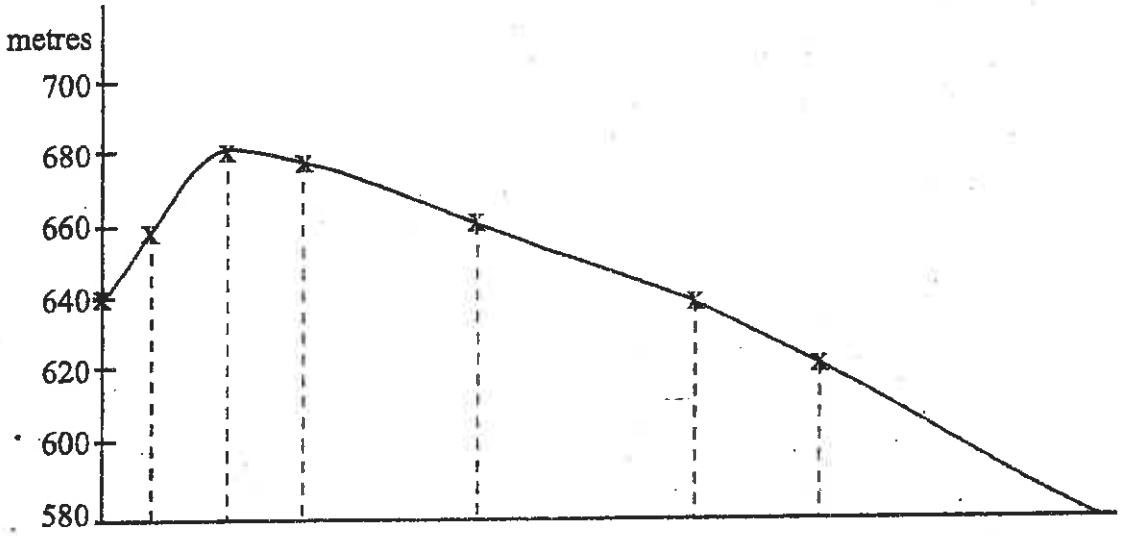
10 The length in km of the main road between Eastings 56 and 58 is

A 3,5.
B 2,5.
C 1,5.
D 0,5.

11 The reason for the small area under cultivation on the map extract is the presence of

A steep slopes.
B mining.
C fishing.
D commercial forests.

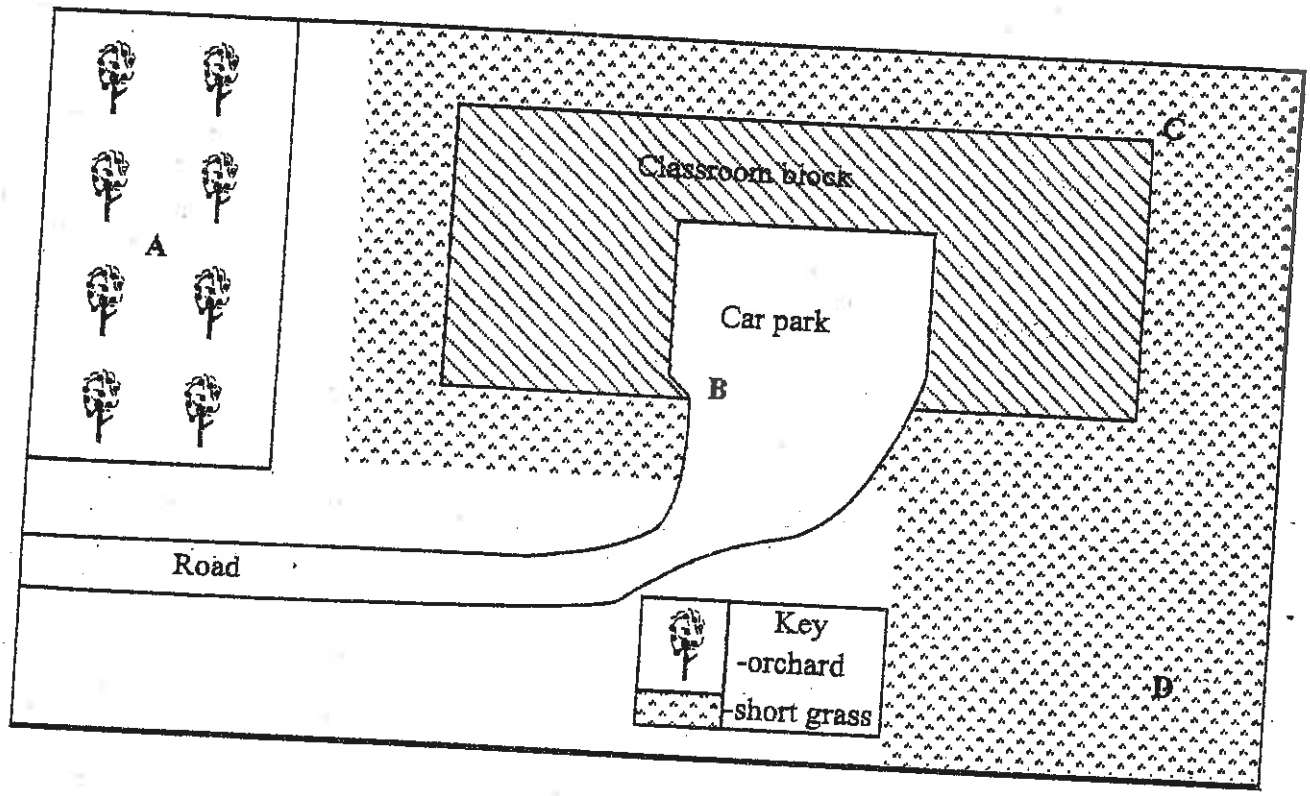
12 The diagram below shows a section drawn along Northing 00.



The area represented is between Eastings

A 57 and 60.
B 47 and 53.
C 53 and 59.
D 56 and 61.

16 Study the layout of a school shown below.



At which of the sites **A**, **B**, **C** or **D** would there be a more serious problem of raised temperatures if a weather station was established there?

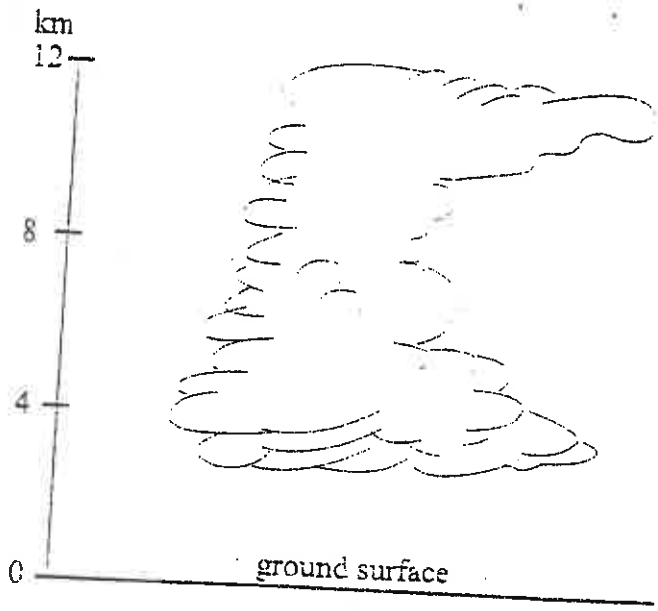
17 Study the table below showing weekly readings of the Six's thermometer.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Maximum temp (°C)	20	25	30	32	28	26	24
Minimum temp (°C)	15	17	20	11	14	16	17

When was the daily temperature range at its highest?

A Thursday
B Friday
C Saturday
D Sunday

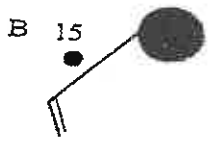
13 Study the diagram below.

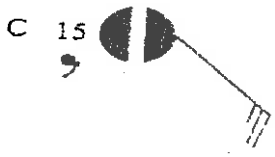


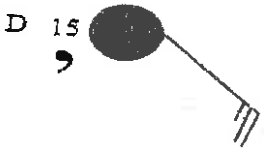
Which weather condition is the cloud type shown associated with?

A occasional showers
B heavy convectional rainfall
C very light rainfall
D continuous cyclonic rainfall

14 As the evening approached, the sky became overcast and a south easterly wind strengthened to some 25 knots. It began to drizzle and temperatures dropped to 15°C.

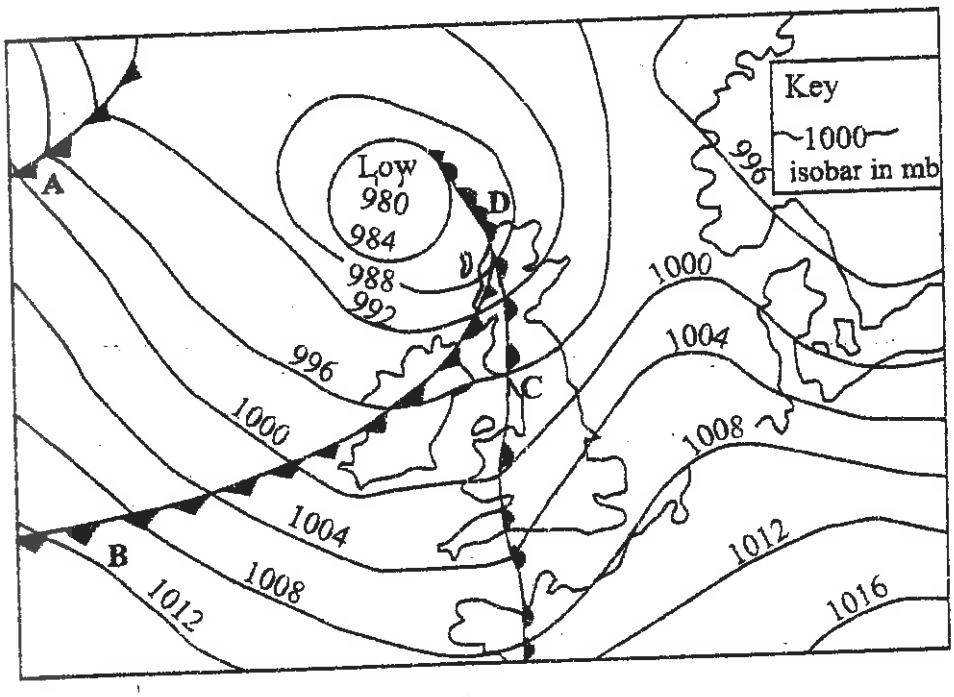






Which of A, B, C or D represents the situation described above?

15 Study the weather map below.

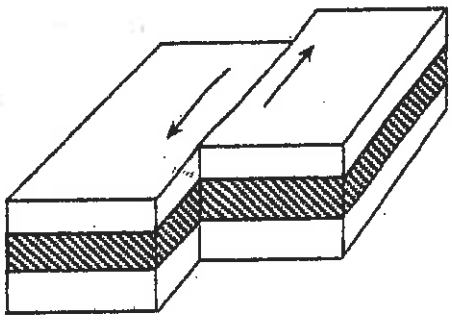


At which of the stations **A**, **B**, **C** or **D** is a cold front approaching at a pressure of around 998 millibars?

18 Which of the following is a river depositional feature?

A levee
B pot hole
C waterfall
D cliff

19 Study the diagram below.



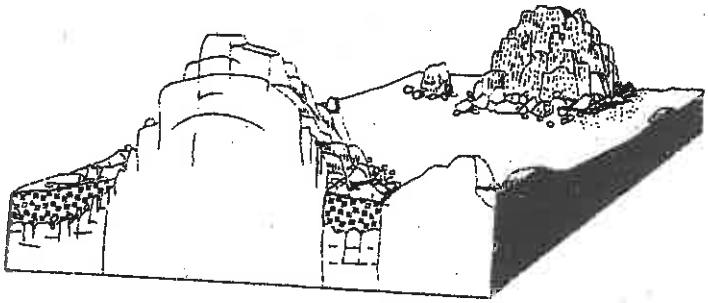
The fault resulting from the movement shown is called a

A normal fault.
B reverse fault.
C simple fault.
D tear fault.

20 At which of the following regions is plate movement described as constructive?

A fold mountain belts
B mid-oceanic ridge zones
C island arc regions
D oceanic trench zones

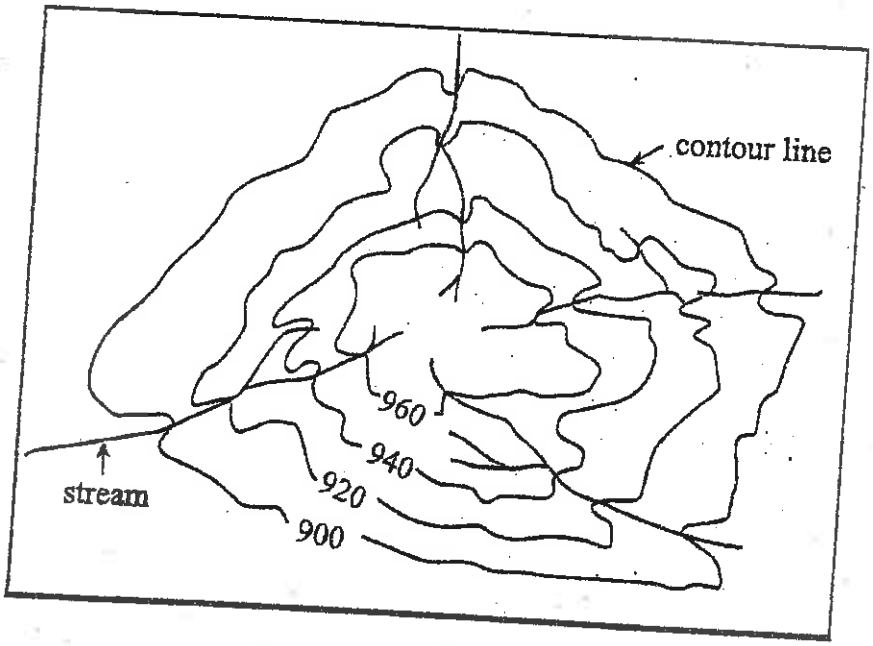
21 Study the diagram below which shows a landform commonly found in Zimbabwe.



The main process responsible for the formation of this landform is

A corrosion.
B exfoliation.
C frost action.
D root action.

22 The diagram below illustrates a drainage pattern.



The pattern is called

A dendritic.
B parallel.
C radial.
D trellis.

23 Study the photograph below.

The type of vegetation shown has adapted to

A low rainfall and high temperatures throughout the year.
B hot, wet summers and cool, dry winters.
C warm, dry summers and cool, wet winters.
D heavy rainfall and high temperatures throughout the year.

24 The practice of growing trees in an area that never had any before is called

A afforestation.
B deforestation.
C reforestation.
D revegetation.

25 Which of the following desert landforms is produced by water deposition?

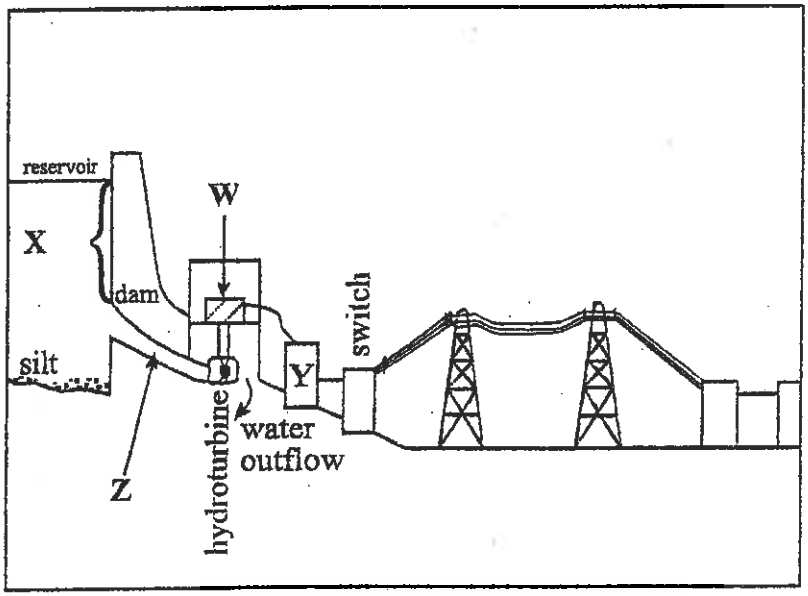
A butte
B rock pedestal
C wadi
D alluvial fan

Economic Geography

26 Which of the following fossil fuels is the cleanest?

A natural gas
B coal
C crude oil
D uranium

27 The diagram below shows a hydro-electric power plant.



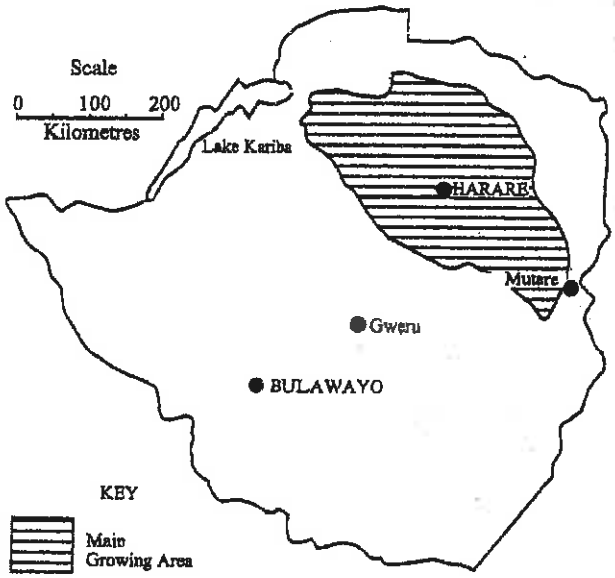
Which of the following represents the head of water and penstock respectively?

	Head of water	Penstock
A	W	Y
B	X	Z
C	Z	X
D	Y	W

28 The Zimbabwean government is removing people from Gonarezhou National Park. The aim is to

A protect soil from over-use by subsistence farmers.
B protect the villagers against dangerous wildlife.
C create more space for irrigation.
D create an extensive international game park.

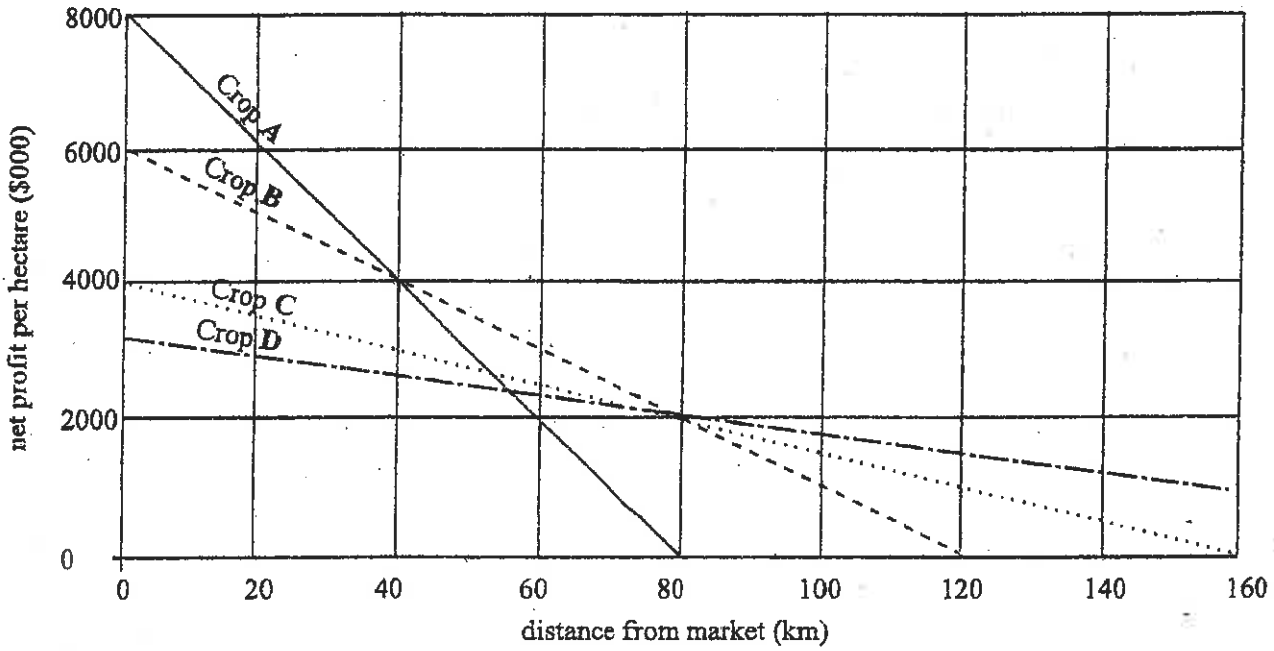
29 The map below shows the growing area of a certain crop in Zimbabwe.



Which crop is it?

A citrus fruit
B tobacco
C sugar cane
D tea

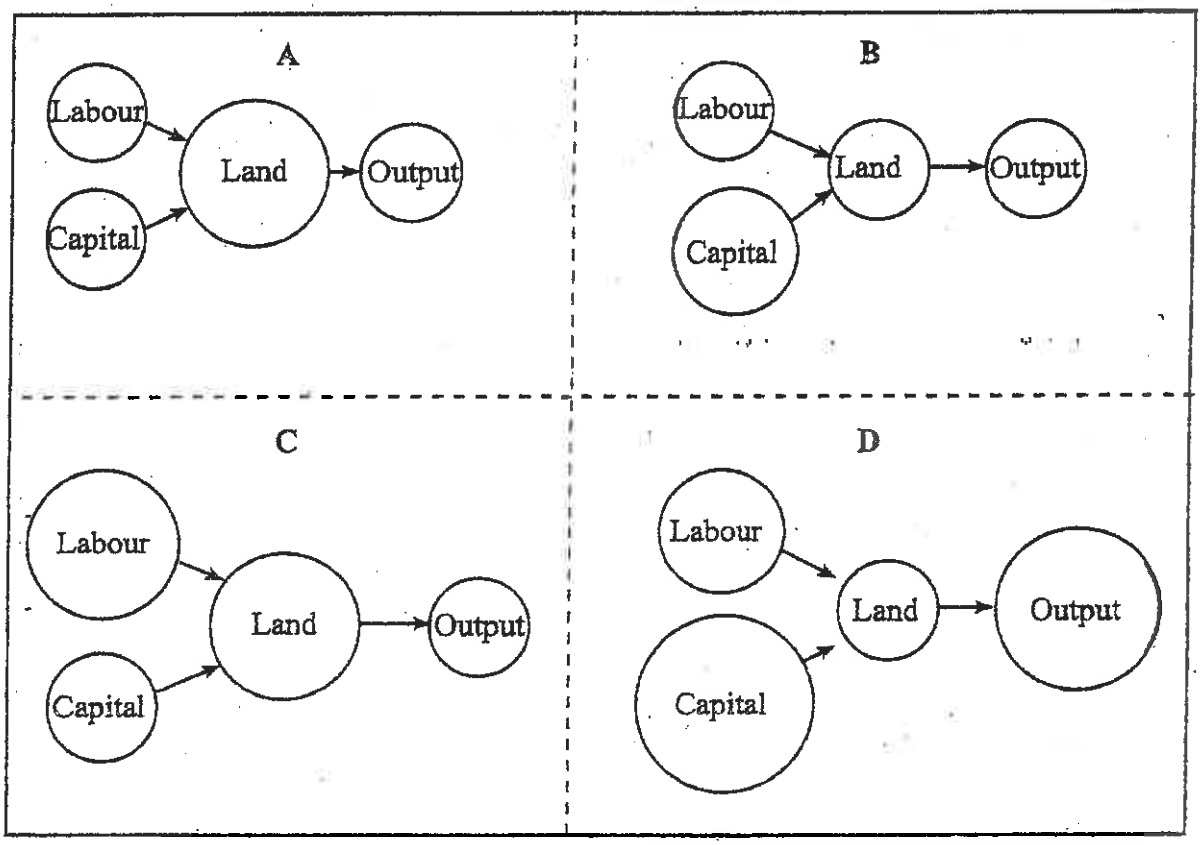
30 Study the diagram below.



Which of the crops A, B, C or D is generating the highest profit at a distance of 50 km from the market?

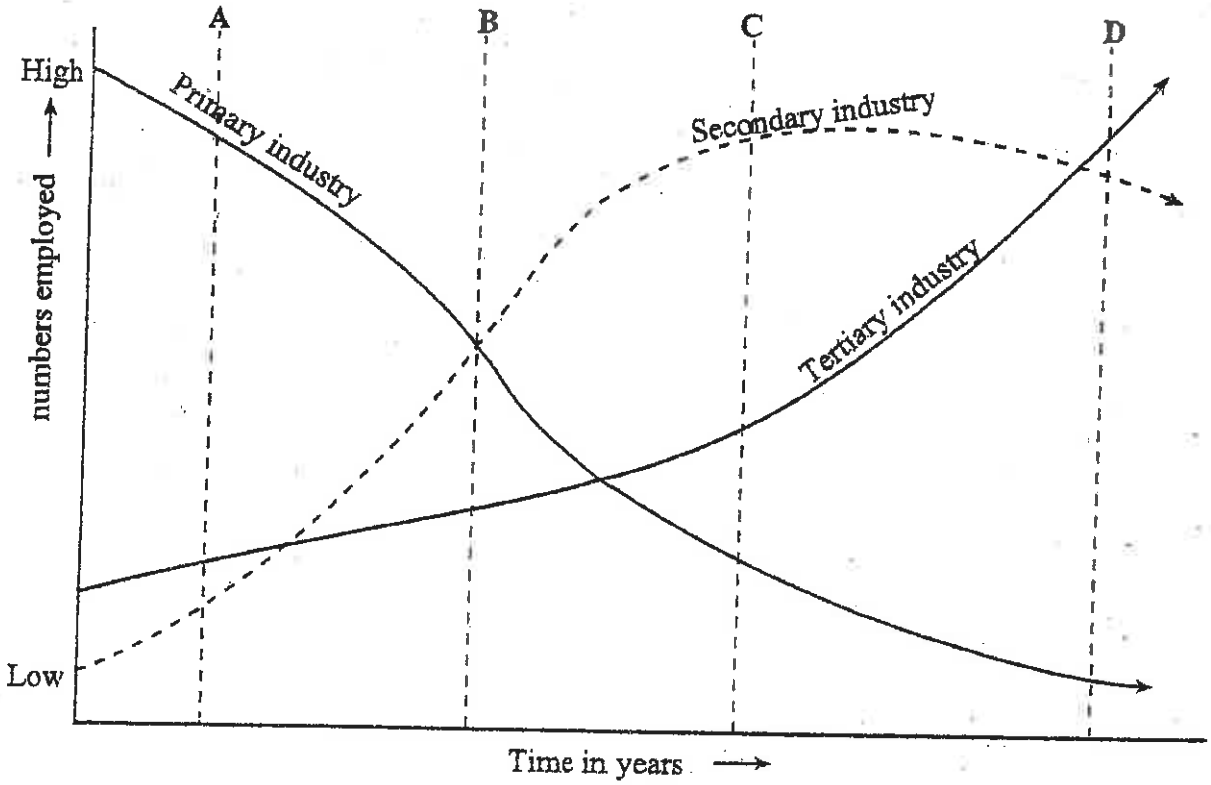
[Turn over

31 Study the diagrams below which show different farming systems.



Which of the diagrams **A**, **B**, **C** or **D** represents intensive market gardening?

32 Study the graphs below.



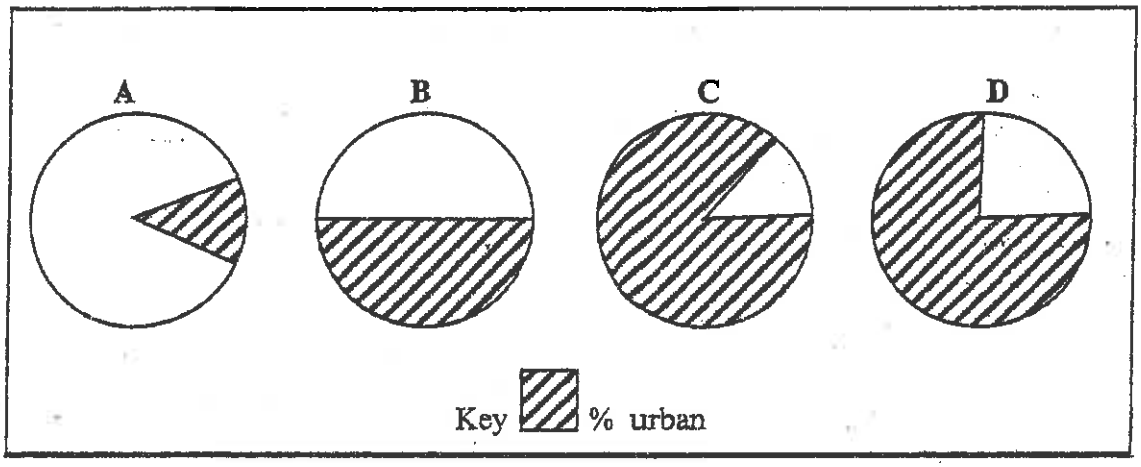
At which of the times **A**, **B**, **C** or **D** is the country least developed?

33 Which group of activities is made up of tertiary industries only?

A banking, research, farming
B transport, food processing, marketing
C marketing, transport, insurance
D tourism, fishing, banking

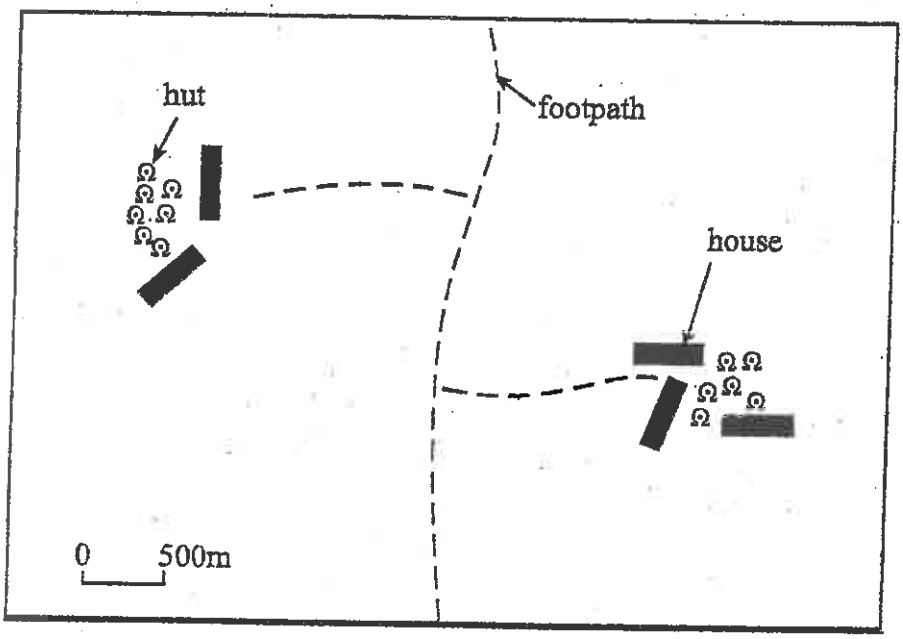
Population, Settlement and Trade

34 Study the pie charts below showing proportions of population living in urban areas for four countries.



Which of the countries **A**, **B**, **C** or **D** is most urbanised?

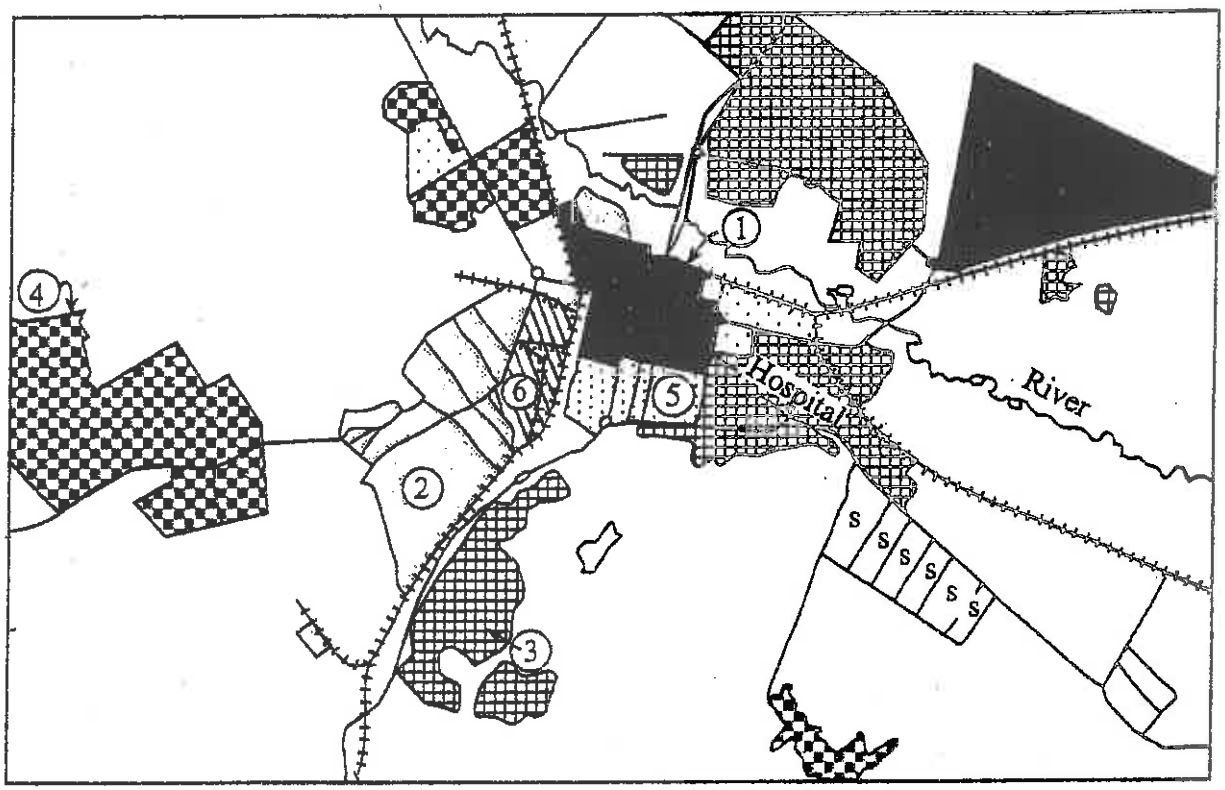
35 Study the diagram below.



The pattern of settlement shown is

A dispersed.
B clustered.
C linear.
D radial.

36 Study the map below.



Key

0 1 2km

Residential(Low density)

Air Base

S S Small Holdings

Railways

Roads

Commercial Business

Industrial

Transport(Station)

Social Land,Recreational

Residential(High density)

Mr. Moyo works at a steel company and lives in an overcrowded residential area. Which of the following shows his work place and where he lives respectively?

	Work place	Where he lives
A	1	5
B	6	2
C	2	4
D	3	1

37 Study the table below.

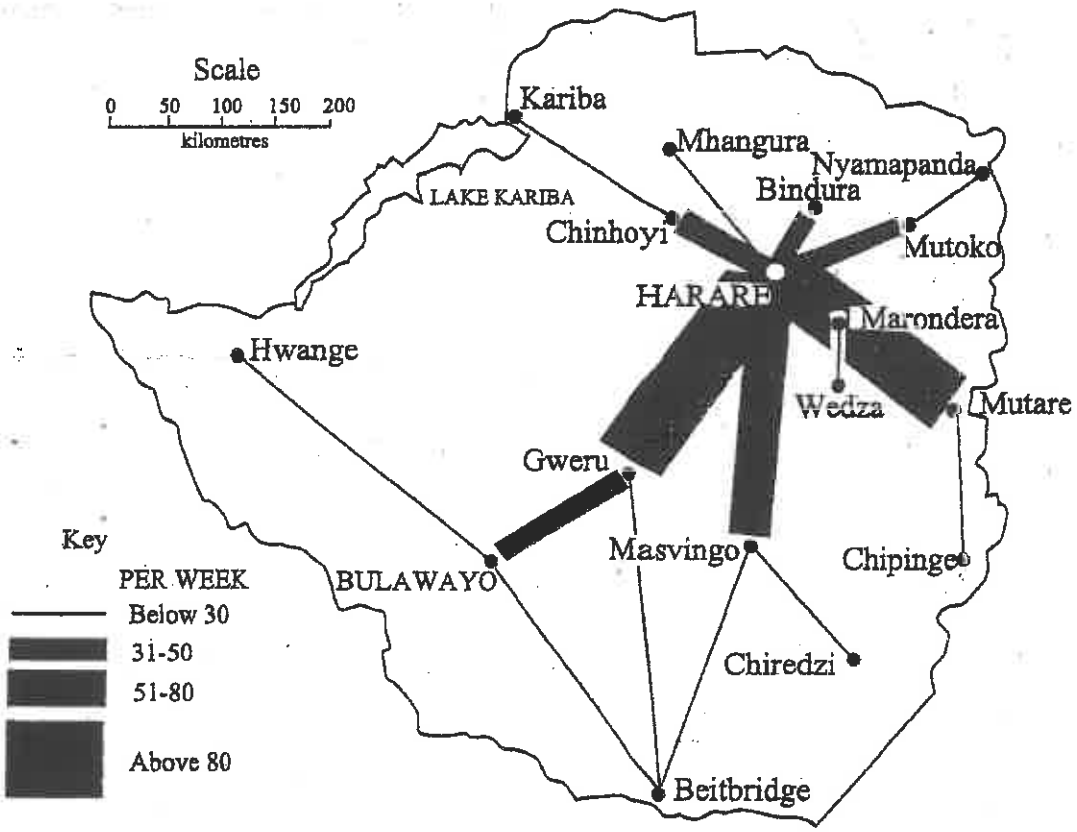
Country	Birth rate per 1000 per year	Death rate per 1000 per year
A	13	12
B	47	15
C	50	16
D	54	12

Which country **A**, **B**, **C** or **D** has the highest natural rate of population increase?

38 The difference between the value of exports and imports for any country is called

A balance of payments.
B balance of trade.
C invisible trade.
D visible trade.

39 Study the map below showing the number of journeys taken by buses in Zimbabwe per week.



How many journeys do the buses make between Harare and Chinhoyi weekly?

A below 30
B 31 – 50
C 51 – 80
D above 80

40 What term describes the daily movement of people to and from work using various forms of transport?

A commuting
B circulating
C cycling
D migrating

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY 2248/1

MARKING SCHEME NOVEMBER 2008

1	A	21	B
2	A	22	C
3	D	23	B
4	B	24	A
5	D	25	D
6	D	26	A
7	B	27	B
8	D	28	D
9	B	29	B
10	B	30	B
11	A	31	D
12	D	32	A
13	B	33	C
14	D	34	C
15	A	35	B
16	B	36	C
17	A	37	D
18	A	38	B
19	D	39	B
20	B	40	A

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY

2248/2

PAPER 2

NOVEMBER 2008 SESSION

2 hours 30 minutes

Additional materials:
Answer paper

TIME 2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.
Answer **four** questions.
Answer **one** question from each of Sections A, B and C and **one** other question from any section.
Write your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

This question paper consists of 15 printed pages and 1 blank page.

[Turn over

Section A (Physical Environment)

Answer at least **one** question from this section.

1 (a) Fig. 1 shows two landforms resulting from volcanic activity.

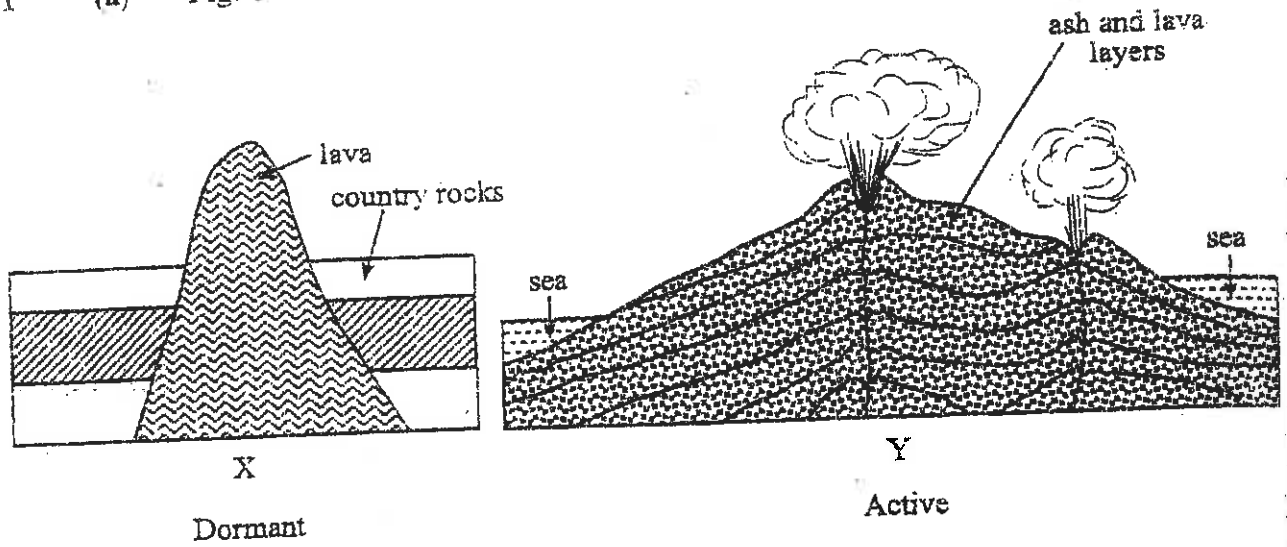


Fig. 1

(i) Explain the difference between active and dormant volcanoes. [2]

(ii) Describe how each of the landforms marked X and Y in Fig.1 could have been formed. [6]

(iii) The eruption of landform Y may trigger *tsunami* in the surrounding seas. Explain what is meant by the term *tsunami*, and suggest any two effects of this feature on densely settled coastal areas. [4]

(b) Table 1 shows environmental conditions under which weathering takes place at three different places P, Q and R.

Table 1

	P	Q	R
Mean annual temperature (°C)	26	16	23
Annual temperature range (°C)	3	18	25
Total annual rainfall (mm)	2000	1500	200
Latitudinal location (°N)	2	45	30
Rock type	granite	limestone	granite

(i) Distinguish between physical (mechanical) and chemical weathering. [2]

(ii) Using information in Table 1 only, describe the weathering that is likely to be dominant at each of the places P, Q and R. [6]

(iii) Suggest why landforms at Q would differ from those at R. [5]

2 (a) Fig. 2 shows sources of air masses and winds affecting Africa in January.

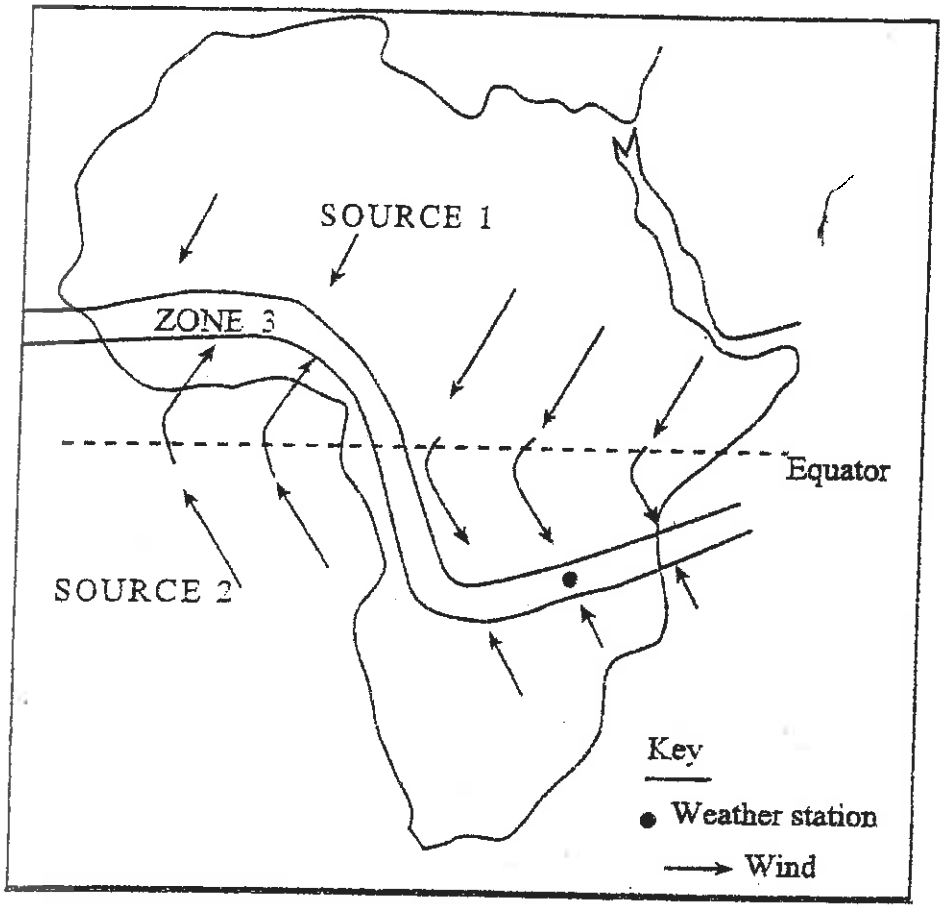


Fig. 2

(i) Name and describe the characteristics of the air masses originating at each of the Sources 1 and 2 shown in Fig. 2. [6]

(ii) Explain the possible weather conditions developing along Zone 3 shown in Fig. 2. [5]

(iii) Suggest **two** weather hazards likely to be experienced at the weather station shown and, for each, propose **one** solution to the hazard. [4]

(b) The graph below (Fig.3) shows the rainfall pattern in Zimbabwe from 1901 to 2004.

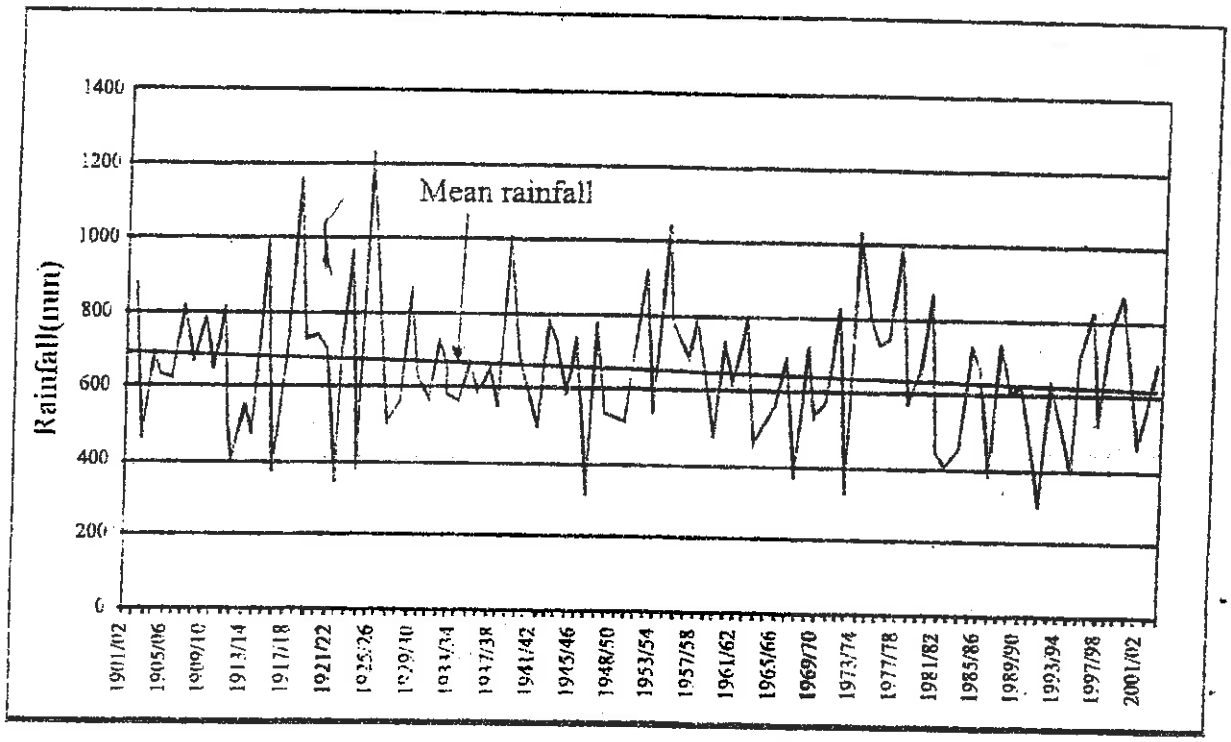


Fig. 3.

(i) State the mean (average) annual rainfall for Zimbabwe shown and describe how this figure is calculated. [3]

(ii) How would the rainfall trends shown in Fig. 3 be a problem to both the farmers and the government of Zimbabwe? [7]

3 (a) (i) Explain why bacteria is very active in tropical rainforest ecosystems. [3]

(ii) Despite the very high levels of bacterial activity in the tropical rainforest ecosystem, suggest why humus content in the soil is very low. [3]

(b) Study Fig. 4 which shows vegetation in three different ecosystems A, B and C.

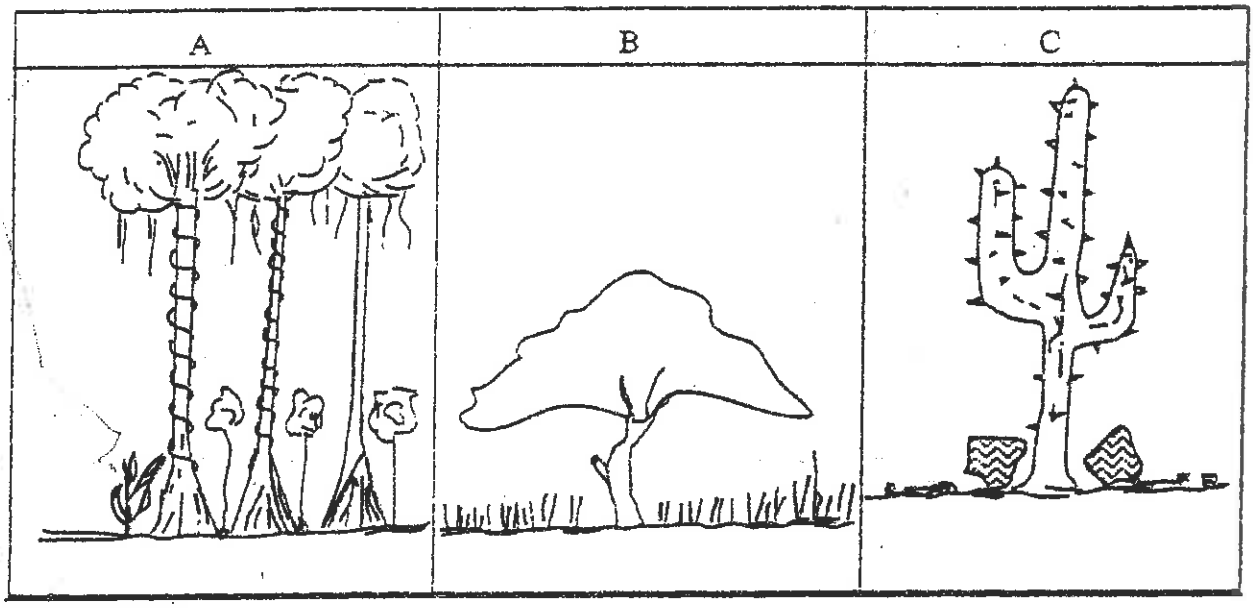


Fig.4

(i) For each of the ecosystems shown, describe how the vegetation has adapted to the prevailing environmental conditions. [9]

(ii) Give **one** reason why there is plenty of wildlife in the ecosystem marked B in Fig.4. [1]

(c) (i) How has the land reform programme in Zimbabwe affected the Savanna ecosystem? [5]

(ii) Propose measures to deal with the effects of the land reform programme on the Savanna ecosystem in Zimbabwe. [4]

Section B (Economic Geography)

Answer at least **one** question from this section.

4 (a) Sustainable use of resources has involved the use of permits and the recycling of used materials.

(i) Define the term 'sustainable use of resources'. [2]

(ii) Using examples, show how the use of permits and the recycling of used materials leads to the sustainable use of resources. [5]

(b) Photograph A below shows the mining of copper in Zambia.

Photograph A

(i) Describe the scene in the photograph. [4]

(ii) What geological and economic factors encourage the exploitation of copper using the method shown in Photograph A? [6]

(iii) Outline the environmental effects of mining copper using the method shown. [4]

(c) It has been observed that the natural resources in Zimbabwe are so plentiful that the current population in the country is insufficient to fully exploit them. Support this observation with the help of examples. [4]

5 (a) Fig.5 shows a factor influencing farming in Zimbabwe.

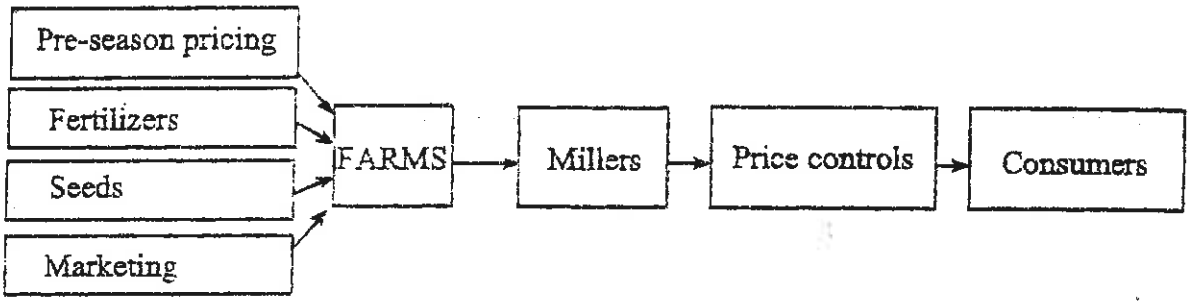


Fig.5

(i) Name the factor shown and one crop affected by this factor. [2]

(ii) Describe, using information in Fig.5, the production of the crop named in (a)(i) above. [6]

(iii) Suggest problems that have arisen in Zimbabwe as a result of the production of the crop under the conditions shown. [4]

(b) Table 2 below shows strategic exports for Zimbabwe in 2005.

Table 2

Crop	% weight in agriculture
Tobacco	25.5
Horticulture	6.5
Cotton	12.5
Sugar	6.5
Beef	10.0

(i) Draw a bar graph to illustrate the information given in Table 2. [6]

(ii) Despite significant foreign currency earnings for the country, outline **one** problem faced by each of the tobacco and beef exports of Zimbabwe. [2]

(iii) Propose solutions to the problems stated in (b)(ii) above. [2]

(c) Describe **three** ways in which the manufacturing industry in Zimbabwe is closely related to agriculture. [3]

6 (a) Fig.6 shows materials and costs involved in the manufacture of three products by some industries.

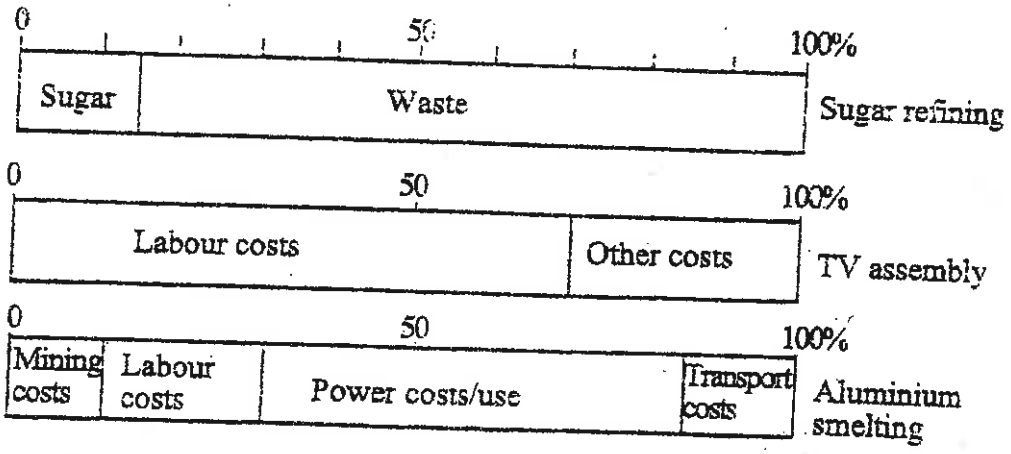


Fig.6

With the help of examples drawn from Africa, explain the most appropriate location for each of the industries given in Fig.6. [9]

(b) Table 3 shows trends in the performance of manufacturing industries in Zimbabwe.

Table 3

Year	No. of operating industries	% operating capacity
1980	6 947	78
1990	4 679	95
2000	2 118	54
2006	964	30

(i) Describe and explain the trends shown. [5]

(ii) As Minister of Industry and International Trade, what measures would you take to improve industrial activity in Zimbabwe? [5]

(c) (i) Define the term 'service industry'. [2]

(ii) Describe the role of information technology in the tourism industry of a country. [4]

Section C (Population, Settlement, Transport and Trade)

Answer at least **one** question from this section.

7 (a) Fig.7 shows changes in a rural settlement in the Midlands Province of Zimbabwe between 1999 and 2006.

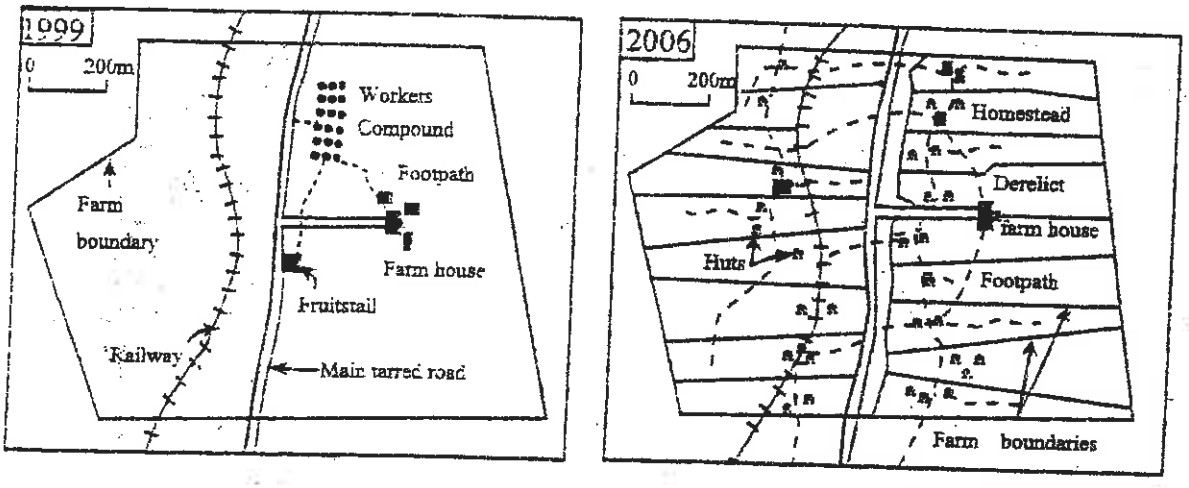


Fig. 7

(i) Describe and explain the differences in the rural settlement between 1999 and 2006 shown in Fig. 7. [7]

(ii) Explain **three** advantages of the settlement pattern for 2006 shown in Fig. 7. [3]

(iii) Which methods has the Zimbabwean government used in its latest resettlement programme? [4]

(b) (i) Distinguish between urbanisation and urban growth. [2]

(ii) In the 21st century, urbanisation and urban growth have been more rapid in developing countries than in developed ones. Why do you think this has been so? [7]

(iii) State and explain **one** negative effect of rapid urban growth in developing countries. [2]

8 (a) Fig. 8 shows population density in Zimbabwe in 2002.

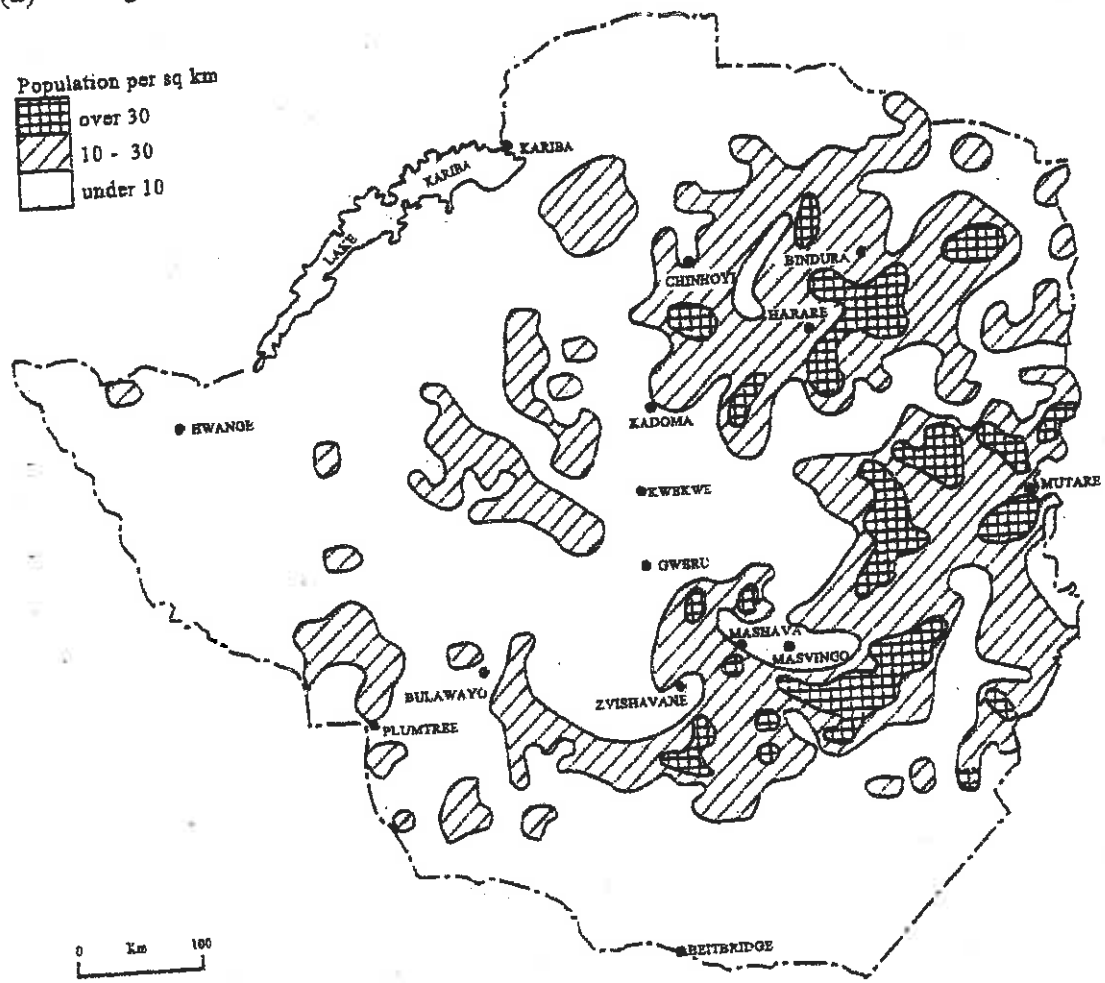


Fig. 8

(i) What is meant by the term 'population density'? [2]

(ii) Describe and explain the population density shown in Fig.8. [8]

(iii) Suggest how the government's land reform programme might have affected the densities shown in Fig.8. [4]

(b) Explain why population growth rates are slowing down in many countries of the developing world. [5]

(c) Study Fig. 9 which shows a source of water supply in a rural environment in Southern Africa.

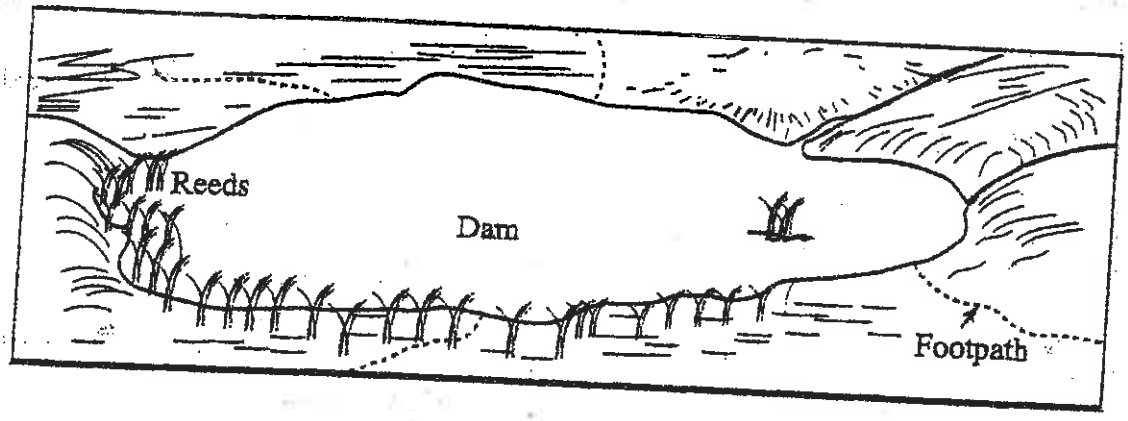


Fig. 9

(i) Identify **two** diseases associated with vectors which people living around the area shown in Fig.9 will suffer from. [2]

(ii) As a rural health worker, for each of the diseases you have identified in (c)(i) above, propose **two** measures you would take to deal with it. [4]

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

POSSIBLE ANSWERS

NOVEMBER 2008

GEOGRAPHY 2248/2

1 (a) (i) Active - volcanoes erupting now, frequently or showing signs of activity

Dormant - volcanoes that are 'resting'/sleeping/erupted in recorded history

1 mark each (2)

(ii)

X	Y
- volcanic plug	- shield volcano
- made from viscous lava	- made from basic lava
- erupted through a vent	- erupted from many vents/fissures
- lava solidified in pipe	- lava flowed extensively from seafloor sideways
- exposed to the surface by erosion	- emerged above sea surface to form island
- lava more resistant than country rocks	- violent eruption

1 mark each. Res 2 for X/Y. Accept crater formation for Y
NB: No mark for name of feature. (6)

(iii) Tsunami - giant waves generated by earthquakes (here caused by the violent eruption of the volcano) /2

Effects
- killing of many people/drowning
- burying many alive
- buildings collapse, injuring people
- roads, telecommunications disrupted
- crops/food supplies destroyed
- disease outbreak etc.

Any two effects /2 (4) [12]

(b) (i) Physical weathering is the breaking down of rocks when heat and/or pressure is applied on them while chemical weathering is the decay of rocks, altering their chemical composition.

2 marks any 1 full difference (2)

(ii)

P	Q
- hydrolysis/humification	- carbonation/solution
- Equatorial area	- cool temperate area
- high T°s, small T° range	- high rainfall
- high rainfall	- low T°s
- thick vegetation	- accept detailed description of carbonation
- active on granite	

Accept detailed description of hydrolysis/humification

R

- exfoliation
- hot desert area
- large T° range

- low rainfall
- induced by T° change
- accept detailed description of exfoliation

2 marks each by ½s (6)

(iii) Landforms at Q

- accept surface landforms/features like grikes, clints, swallow holes, dry valleys, blind valleys, uvalas, dolines and poljes. Also accept features subterranean such as caverns, stalactites and stalagmites as well as underground rivers
- main reasons – products of carbonation on limestone rock in a temperate area

Landforms at R

- accept dryland granitic features such as spheroidal boulders, scree, inselbergs, pediments
- main reasons – products of exfoliation and flash floods on granite rock in a hot desert environment

1 mark each. Res 2 for Q/R. No mark for mere mention of landform(5) [13]
[25]

2 (a) (i)

Source 1	Source 2
Name: Tc/Tropical Continental	Tm/Tropical maritime/2
Characteristics: - hot, dry, stable	- warm, wet. unstable

2 marks each on characteristics /4 [6]

(ii)
- 1 mk for identifying Zone 3 as the ITCZ/Intertopical convergence zone
- the hot, Tc undercuts the warm moist Tm
- convective activity takes place
- the rising air expands and cools
- cumulonimbus clouds develop in line squall form
- heavy rains fall, accompanied by thunder and lightning

1 mark for name of zone and 4 for descriptions (5)

(iii)

Weather hazard I	-	lightning
Solutions	-	lightning conductors, education, staying indoors, EWSs(early warning systems)
Weather hazard 2	-	violent winds
Solutions	-	EWSs, evacuation, planting trees around homes, barricading homes
Weather hazard 3	-	flooding
Solutions	-	EWS, evacuation to higher ground, river embankments, flood control dams, rescue operations

Weather hazard 4: hailstorms

Solutions: staying indoors, education, EWS, cloud seeding

Any 2. 1 mk for name and 1 mk for solution (4) [15]

(b) (i) Mean rainfall - 700 mm /1

Calculation - add the mean annual rainfall of the 103 years and then divide by 103 /2

Or: - add the individual annual totals and then divide by the number of years covered /2 (3)

(ii)
- trends show unreliable rainfall
- both cannot accurately plan using the available data
- above normal rains will cause flooding (accept all problems related to floods)
- below normal rainfall results in drought (accept all problems related to droughts)
- problems of flood control, evacuating people, diseases etc should be accepted
- costs of dealing with droughts e.g. importing food, building dams, relocating people and livestock to drought-free areas should be accepted

Candidates can pick on specific years of flooding and droughts and outline the problems faced individually or nationally. This is acceptable. 1 mark each point. (7) [10]

[25]

3 (a) (i) Reasons
- high rainfall
- high temperatures
- large biomass to act on
- stable ecosystem

1 mk each (3)

(ii) Humus content is very low because

- much is quickly taken up by rapidly growing vegetation
- it is leached by water
- it is washed away by surface runoff
- it is food for small creatures e.g. ants and termites

1 mk each (3) [6]

(b) (i) A
- tall trees – rapid growth, high T°s, high rainfall, competition for sunlight
- buttressed roots – shallow soils, to anchor the huge trees
- climbers/lianas – for support, to get to the sunlight
- little undergrowth – canopy /3

B
- umbrella shaped tree
- scattered trees – space to spread out
- to protect roots from the sun

- crooked trunk
- tall grass
- dry grass

- fire, heat, effect of wind
- seasonal fire, spaced trees /3
- dry season/low rainfall

C - cactus/euphorbia

- succulent leaves - to store water, long hot dry climate
- thorns – to reduce evapotranspiration losses
- few plants – hot dry climate and poor soils /3 (9)

(ii) Reasons – plenty of food; plenty of space to move/hide (1) [10]
- plenty of water on the surface

(c) (i) Effects of ecosystem
- deforestation
- destruction of animal habitats
- increased soil erosion
- reduced rainfall
- fire clearance – destruction of micro-organisms
- burning loosening soils
- increased surface T°, CO_2 emissions and global warming
- destruction of wildlife through poaching etc.

1 mark each (5)

(ii) Possible measures
- legislation against tree cutting, use of fire
- fines/imprisonment against poachers
- education (esp. by AREX)
- frequent audit/monitoring of landuse systems
- police patrols to implement measures etc
- reforestation.

1 mark each (4) [9]
[25]

4 (a) (i) Sustainable use of resources – the wise use of resources by the present generation so that they are available for future generations
2 marks for full definition. (2)

(ii) Use of permits - e.g. fishing/hunting permits – this restricts the quantities caught/hunted; it controls times for fishing/ hunting; permit holders declare what is caught/hunted; permits are expensive to limit the number of holders; this prevents overfishing/overhunting to protect the fish/animals.

Recycling - e.g. of paper/scrap metal/bottles – used materials are reused over and over; this

reduces the cutting of softwoods to produce paper or the mining of more minerals for metals and bottles; available forests and/or minerals are conserved for future use.

1 mk each. Res. 2 for Use/Recyling (5)[7]

(b) (i)
- open cast mining
- mechanised mining
- dragline digs and loads the ore
- tipper lorry takes the copper away
- flat operating platform
- rough rock exposures around
- some rock rubble piled on ground (result of blasting?)

1 mk each (4)

(ii) Geological
- ore less than 50 metres below the ground surface
- ore seams horizontal and extensive
- ore body above the water table
- ore concentration to be economic

Economic
- capital required in large amounts to: buy the machinery; pay the skilled labour; pay for transport and power; install a crushing plant
- demand for copper must be high to warrant large capital investment etc

1 mk each. Res 2 for G/E (6)

(iii) Environmental effects
- vegetation clearance to start open-cast mining
- mountains of removed overburden
- dust pollution from blasting and moving machinery
- noise pollution from machines and blasting
- scars on the surface after abandonment of the pit
- pit filled with filthy water – mosquitoes, snails etc

1 mk each (4) [14]

(c) Reasons
- much land in the country unoccupied i.e. population density for the country is small at 30/km^2
- virgin forests still plentiful in the country e.g. Eastern Highlands, Gokwe North, SE Lowveld, Zambezi Valley etc.
- minerals are continuously being discovered e.g. platinum, diamonds, gold, coal, natural gas
- wildlife is in abundance – most poachers are from outside Zimbabwe

1 mark each point and 1 mk each example (4) [4] [25]

5 (a) (i) Factor - government policy /1
Crop - maize/wheat /1
1 mark each (2)

(ii) Only maize is described here

Pre-season pricing - government announces selling prices of maize to farmers to encourage them to plant more maize as it is a staple food crop

Fertilizers - these are supplied to farmers, esp. A1 ones at a subsidised cost, or usually for free. A2 farmers have to buy their own fertilizers, ammonium nitrate and compound D. Government imports or asks local producers to supply

Seeds - see the fertilizers situation

Marketing - from the farms, it is compulsory in Zimbabwe to sell maize to the GMB at prescribed prices. The GMB then sells to maize millers. As millers supply retail outlets, then sell at prices determined by the state.

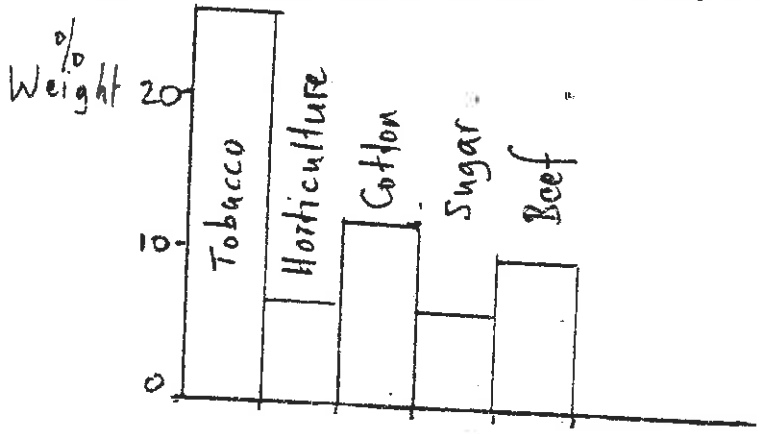
1 mk each. Res 1 for each aspect (6)

(iii) Problems:

- late announcement of producer prices
- pre-season prices may not be given so farmers do not grow enough hectarage of the crop.
- fertilizers and seeds may be insufficient, forcing government to import, wasting scarce forex
- some farmers sell the fertilizers and seeds, resulting in low crop yields
- much corruption has resulted from the distribution and allocation of seed and fertilizer
- millers by-pass the GMB to deal directly with farmers, creating a shortage
- price controls make millers cheat, fuelling the black-market
- consumption of seed as food
- late distribution of seed and fertiliser
- poor quality of seed
- inflation
- shortage of fuel

1 mark each (4) [12]

(b) (i) Bar graph. Each correct label = ½. Wrong or no scale – no mark.



(6)

(ii) Tobacco
- low volumes exported due to anti-tobacco lobbying drought, poor quality caused by disease

Beef
- diseases (anthrax, foot and mouth etc.) leading to suspension of exports, sanctions
- politics where traditional mkts snub Zimbabwe's beef drought

1 mk each (2)

(iii) Tobacco
- look for other mkts e.g. RSA, East Asia etc.
- follow stringent advertising standards on effects of tobacco to educate consumers

Beef
- buy adequate medicines to deal with disease outbreaks
- quarantine affected areas and vaccinate
- maintain high standards of animal husbandry
- closely monitor and control movement of buffalo from parks

1 mk each (2) [10]

(c) 3 ways
- supply of fertilizers e.g. ZIMPHOS
- manufacture of chemicals – insecticides, fungicides etc
- manufacture of agriculture machinery e.g. ploughs. tractors
- processing of agricultural produce e.g. Blue Ribbon
- manufacture of irrigation pipes

(3) [3] [25]

6 (a) Sugar
- E.g. Triangle/Hippo Valley/Chiredzi (1)
- raw material location (1)
- to reduce transport costs: (1) – 85% of the sugar cane is waste and only 15%$ is sugar (1) /3

TV assembly
- E.g. Phillips/WRS – Harare/Bulawayo (1)
- skilled labour location (1)
- skilled labour location (1)
- skilled labour is available in large cities (1) where there is also accommodation and entertainment (1). It would be costly to move the labour to new sites (1) /3

Aluminium smelting
- E.g. Tema/Akosombo (Ghana) (1)
- power-based location (1)
- in this industry power costs are the highest (1) (55%)
- the making of aluminium needs much power (1) (the electricity needed to make one tonne of aluminium is as much as that used by an ordinary house in Europe in 12 yrs) /3

In each case, 1 mk for name of industry, 1 mk for locational orientation and 1 mk for reason [9]

(b) (i) Descriptions

-	1980 – 1990	-	decrease in operating industries
-	1990 – 2000	-	decrease in operating industries
-	2000 – 2006	-	sharp decrease in operating industries
-	1980 – 1990	-	increase in operating capacity
-	1990 – 2000	-	decrease in operation capacity
-	2000 – 2006	-	decrease in operation capacity

Explanations

Increase in operating capacity due to: country independent; period of reconstruction to 1990; forex available; mkts available

Drop due to:
- economic sanctions
- shortage of forex
- inflation
- low exchange rate
- factory closures
- wage and pricing policies
- entry of RSA, China and Botswana products
- power and fuel problems
- less manpower, etc

1 mk each. Res 2 for D/E (5)

(ii) Measures
- devalue the Zim dollar
- promote the tourism industry for more forex
- reduce tax on company export earnings
- import more fuel and power
- deregulate pricing and wage laws
- look for markets elsewhere e.g. 'Look East' policy
- integrate with SADC
- capital injection into industry by RBZ
- smart partnerships

1 mark each (5) [10]

(c) (i) Service industry - an industry which provides back-up to other economic activities in a country
2 marks for complete definition (2)

(ii) Role of information technology is to

- advertise the tourist attractions e.g. on the internet
- reach as many tourists as possible
- inform on : hotels available and their ratings
  : banking facilities
  : transport facilities
  : package tours
  : security
  : bookings etc.
- provision of more entertainment

1 mark each Credit on types of information to attract tourists (4) [6]
[25]

7 (a) (i)

1999	2006
Descriptions	Descriptions
- few buildings/modern - main farm house and few outbuildings - compact/clustered workers compound - buildings scattered - workers compound	- many huts - few modern buildings - former farmhouse destroyed - linear rural settlement - no workers compound
Explanations	Explanations
- commercial farming area - separation/segregation of commercial farmer and workers	- land reform - former farm sub-divided into many smaller plots to accommodate more farmers - mainly huts as these are newly resettled farmers

1 mk each. Res. 3 for D/E (7)

(ii) Advantages: Easier provision of
- piped water
- electricity
- irrigation
- schools/clinics
- information
- services, e.g. AREX
- transport, etc

1 mark each (3)

(iii) Methods of latest resettlement programme

- government acquired land compulsorily from former white commercial farmers: this was done though the press/government gazette
- Black settlers applied for land offers under A1 or A2 schemes
- offer letters given to vetted land seekers
- compensation only for improvements to former owner
- 99-year leases given to new occupiers
- new settlers move in, building mainly huts in the process
- audit of land use undertaken by government
- fast track land acquisition
- farm invasions, etc

1 mark each point (4) [14]

(b) (i) Urbanisation - the process of acquiring urban ways of life e.g. use of piped water, electricity, entertainment, transport, housing etc. /1

Urban growth - the physical expansion of the built-up areas of towns and cities and their population growth. /1

2 marks for a complete comparison (2)

(ii) Reasons
- these to relate to rural problems and urban attractions e.g. lack of education, health, good sanitation in rural areas
- lack of industries, jobs, entertainment in rural areas
- the lure of towns/cities through perceived existence of jobs, good housing, entertainment, health, education, transport etc
- rapid population growth in rural and urban areas of developing countries
- long history of urbanisation and urban growth in developed countries – they are now beyond the peak
- low or no population growth in developed countries

1 mk each point (7)

(iii) Negative effects
- shortage of housing
- growth of squatter/informal settlements
- pressure on water, power, transport, sewage systems
- crime
- prostitution
- negative impacts of growth of the informal sector

Explanation:
- influx of people into urban areas than provision of services and jobs.
- unemployment

(2) [11]

[25]

8 (a) (i) Population density – number of people per unit area (usually per km^2) (2)

(ii)

Descriptions		Explanations
Over 30 -	a horseshoe shaped area from the NE to E and SE of the country - in eastern Mash West, southern Mash. Central, and southern Manicaland and central Masvingo and southern Midlands	- cool; wet; good agric. soils; disease free; long history of settlement; development areas in industries, transport networks, mining and towns,
10 – 30 -	surrounding the high density areas described above; but also west of Kadoma and and Kwekwe, Karoi area, around Bulawayo and Plumtree, north of Nyanga and SW and W of Zvishavane.	- reasons are as the over 30 density group; accept reference to agro-ecological regions as well as political Land Apportionment factors.
Under 10 -	rest of the country; lowveld areas, around Hwange, Kariba, Beitbridge, Gweru; Kwekwe etc.	- hot; dry; poor soils: state lands (national parks and forest lands); diseases; remote; commercial farms; mining concessions - poor transport network
	1 mark each. Res 3 for D.E	(8)

(iii) Effects of land reform

- decongestion of communal areas densities (reduction in over 30 and 10 – 30 densities)
- increased population in the under 10 category especially along the central watershed
- fair spread of population, even on idle commercial farms
- increase in urban settlements (higher densities) through growth points
- decongestion of towns and cities by offering farms etc

1 mk each (4) [14]

(b) Reasons
- effective family planning programmes
- strong population control policies e.g. China's 'one child policy'
- increased literacy especially for women
- keeping girls in school longer
- liberation of women to make choices and to work
- harsh economic environments

- impact of HIV/Aids
- international outmigration by young adults to developed countries for better-paying jobs etc

1 mk each (5) [5]

(c) (i) Bilharzia and malaria. Do not accept cholera, diarrhoea (2)

(ii) Bilharzia
- spraying the snails
- cutting reeds and tall grass around the dam
- putting protective clothing when fishing e.g. gumboots
- treating the affected
- education etc Any 2 /2

Malaria
- spraying to kill the mosquitoes
- oil on dam to kill larvae
- cutting reeds and tail grass around the dam
- mosquito nets
- treating the affected
- education
- draining the dam etc. Any 2 /2 (4) [6]

1 mark each. [25]

9 (a) (i) Descriptions

- RSA has the largest density of rail network
- it is followed by Zimbabwe, then Namibia and Angola
- Botswana has the smallest rail density followed by Malawi, Swaziland, Lesotho and Zambia
- India Ocean ports have more railways than Atlantic Ocean ones
- some railways from the west coast end inland
- railways are more concentrated in the eastern parts of SADC
- railways from ports inland

Explanations

- RSA has the largest economy in SADC. more mining. farming and industries, to move RMs, goods and services, large population
- Zimbabwe has a fairly developed economy, to move minerals, timber, farm produce etc
- Botswana is mainly desert as well as eastern Namibia and SE Angola. low population – low economic activity
- Malawi, Swaziland and Lesotho have very small economies and very rugged terrain
- more ports on east coast:- conducive climate for human settlement
- Eastern concentration is due to flat terrain and cool, wet climate
- effect of colonial policies and the division by colonial power:- each to develop its own territories etc

1 mk each Res 3 for D/E (8)

(ii) - Bulawayo has a higher railway connectivity (more nodal)
- it is linked to more countries than Windhoek
- it is closer to the RSA

1 mk each (3)

(iii) Problems include

- different gauge widths of the railway lines
- use of different energy systems on railways e.g. coal/steam, diesel, electricity
- lack of economic integration in SADC
- protectionism (tolls and tariffs) by some SADC countries
- distrust etc 1 mk each (3) [14]

(b) (i) COMESA - Common Market for Eastern and Southern Africa /1
EU - European Union /1 (2)

(ii)

EU	COMESA
- common currency (Euro)	- no common currency
- integrated market	- un-cordinated market
- no trade and migration barriers	- trade and migration barriers e.g. visa
- single agricultural and trade policies	- requirements, customs duties, quotas and tariffs
- massive in-migration from Asia, Africa and the Caribbean	- multiple policies
	- movements mainly to RSA and Botswana with stronger currencies and more job opportunities
- more developed	- less developed

1 mk each (5) [7]

(c) Measures to deal with regional imbalances in Zimbabwe

- broaden growth point development scope
- explore for minerals in remote parts of the country
- establish irrigation in hot, dry areas of the country
- build roads and railways to remote areas
- electrify rural areas
- tax holidays for industries and businesses moving to undeveloped areas
- prevent industries and businesses from locating in prosperous areas e.g. Harare, Bulawayo
- establish EPZs in undeveloped areas etc. 1 mk each (4) [4]

[25]

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY 2248/1

PAPER 1 Multiple Choice

JUNE 2009 SESSION 1 hour 15 minutes

1:50 000 Survey Map is enclosed with this question paper

Additional Materials:
- Multiple choice answer sheet
- Soft clean eraser
- Soft pencil (type B or HB is recommended)

TIME 1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so by the invigilator.
Write your name, Centre number and candidate number on the answer sheet in the spaces provided unless this has already been done for you.

There are **forty** questions in this paper. Answer **all** questions. For each question there are four possible answers, **A**, **B**, **C**, and **D**. Choose the **one** you consider correct and record your choice in **soft pencil** on the separate answer sheet.
Read very carefully the instructions on the answer sheet.

INFORMATION FOR CANDIDATES

Each correct answer will score one mark.
A mark will **not** be deducted for a wrong answer.
Any rough working should be done in this booklet.

This question paper consists of 19 printed pages and 1 blank page.

Mapwork

Questions 1 to 12 refer to the 1: 50 000 map of Kildonan, Zimbabwe.

1 The man-made feature located at grid reference point 445 773 is a

A gravel road.
B power line.
C railway line.
D wide tarred road.

2 What name is given to the physical feature named UMVUKWE RANGE on the map?

A plateau
B ridge
C saddle
D spur

3 In grid squares 4471, 4571 and 4670, the Mukwadzi River cuts across a mountain range. This is an example of

A antecedent drainage.
B dendritic drainage.
C trellised drainage.
D superimposed drainage.

4 What is the bearing of trigonometrical station 154/S (grid square 4264) from the dip tank in grid square 3769?

A 95°
B 105°
C 135°
D 225°

5 The distance along the wide tarred road in the south west corner of the map running through Mpinga and Ushamba Estates is

A 4 km 400 m.
B 4 km 450 m.
C 4 km 500 m.
D 4 km 550 m.

6 A mountain climber standing at the trigonometrical station 154/S on Muneni hill (grid square 4264) sees a mine dump 500 metres away. In which direction is he looking?

A North-West
B West
C South-East
D East

7 The slope of the land across the Umvukwe Range along Northing 72 between Eastings 44 and 48 is best described as

A up all the way.
B down all the way.
C up and down, up and down.
D down and up, down and up .

8 Sutton, named in grid square 4475, is

A a mine.
B an estate.
C a rural settlement.
D an industrial town.

9 What is the pattern of rural settlements shown on the map extract?

A clustered
B dispersed
C haphazard
D linear

10 The approximate area under cultivation in grid square 4067 of Mimosa Estate is

A 4 km^2.
B 2 km^2.
C 1 km^2.
D ½ km^2.

11 The railway line shown on the map extract has been built along

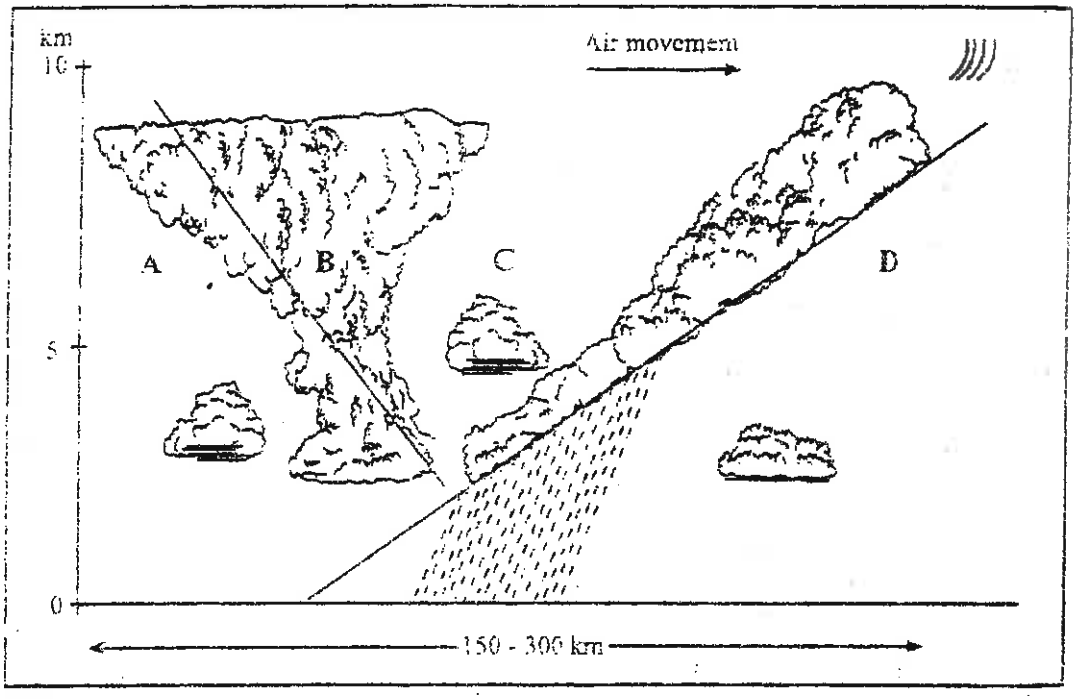
A an escarpment.
B a foothill.
C a valley.
D a watershed.

12 Which of following pairs describes the major landuses shown on the map?

A transport and housing
B cultivation and forestry
C cultivation and mining
D ranching and forest

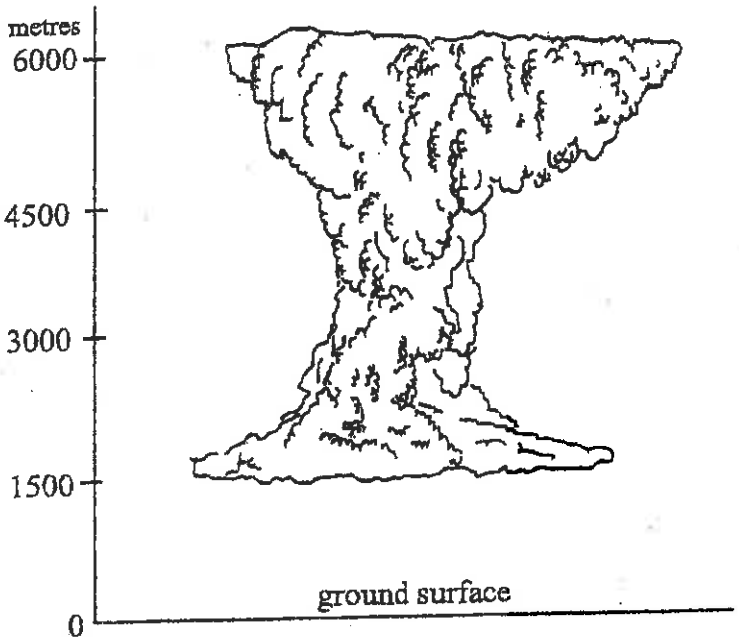
Physical Environment

13 Study the diagram below showing weather fronts.



At what point A, B, C, or D will an aircraft fly through the warmest air?

14 The diagram below shows a cloud type.



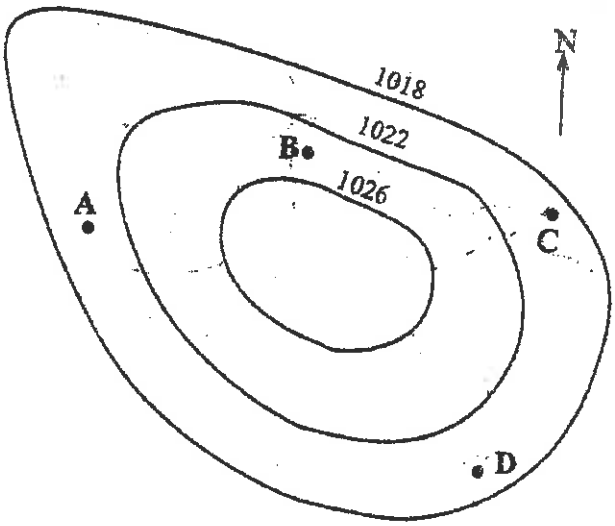
At which height does condensation begin?

A 1 500 m
B 3 000 m
C 4 500 m
D 6 000 m

15 A particle of ice that is formed when a raindrop is carried upwards into a cooler environment in a cloud is called

A dew.
B frost.
C hail.
D sleet.

16 The diagram below shows a pressure pattern in North Africa.

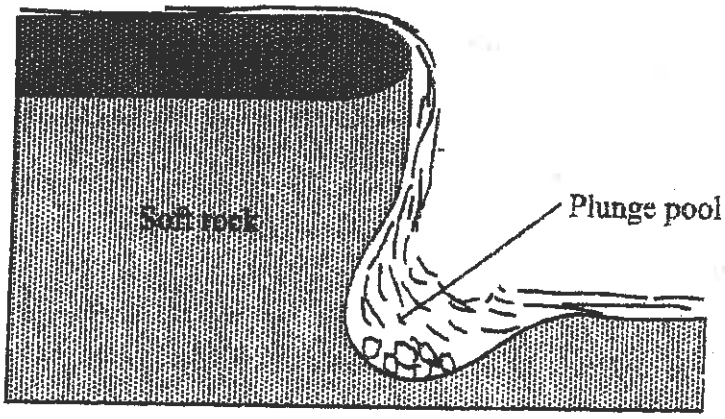


Key

1018 isobar in millibars

At which point **A**, **B**, **C** or **D** is the wind blowing from the north-easterly direction?

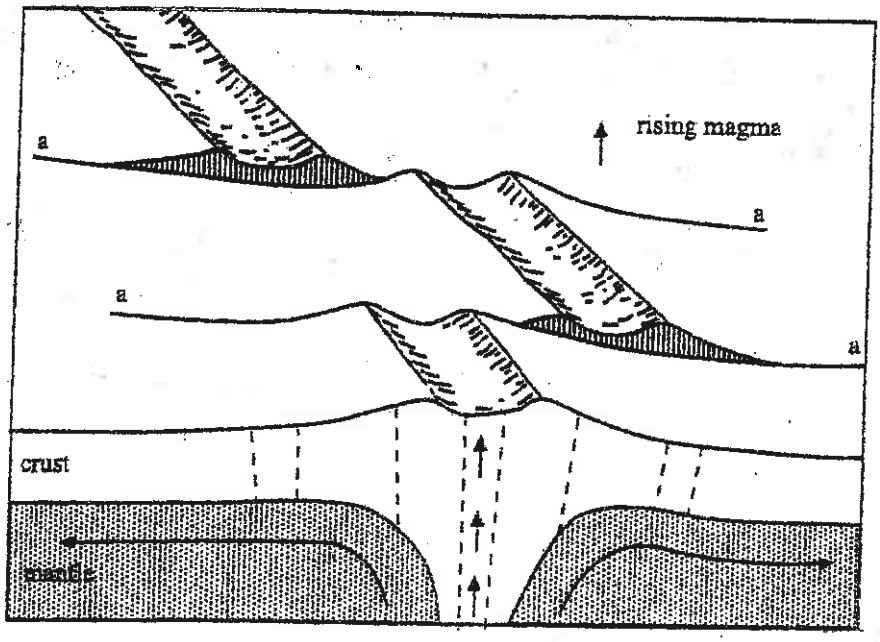
17 Study the diagram below.



The landform shown is a

A rapid.
B meander.
C braided channel.
D waterfall.

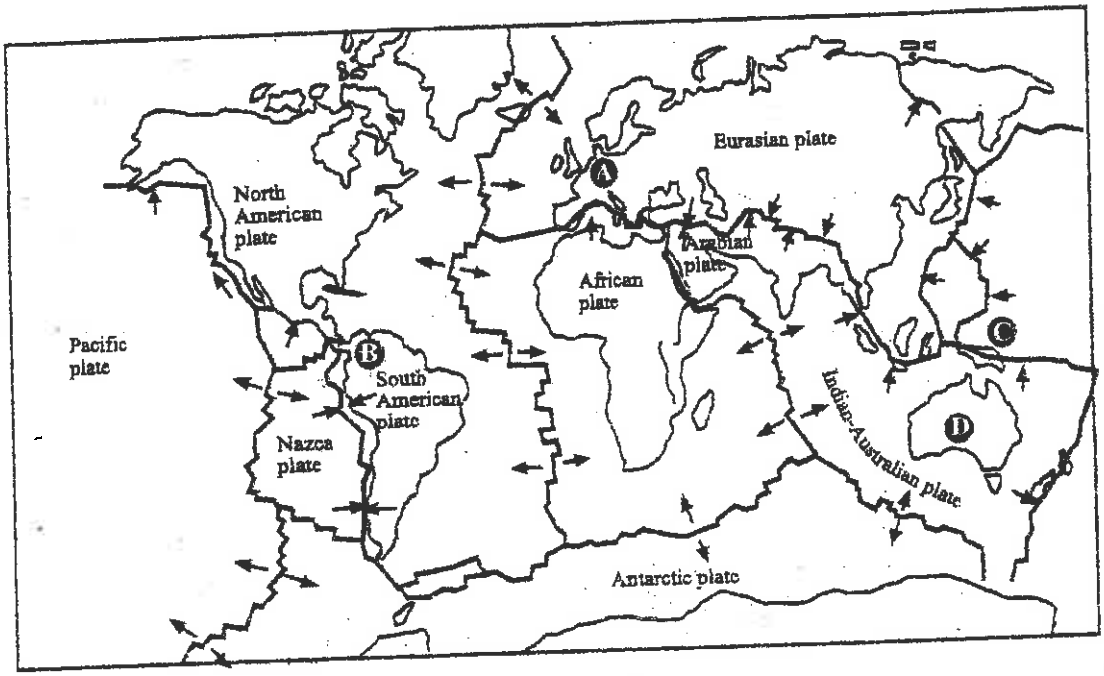
18 The diagram below shows the main features of a mid-oceanic ridge.



The features marked a a are

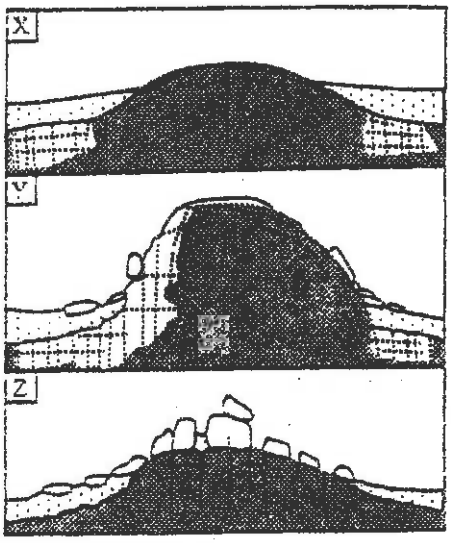
A normal faults.
B transform faults.
C reverse faults.
D step faults.

19 The map below shows the world's major crustal plates and their movement.



Which of the areas **A**, **B**, **C** or **D** would pose the greatest risk for the construction of multi-storied buildings?

20 The diagrams below show stages in the formation of features commonly found in Southern Africa.

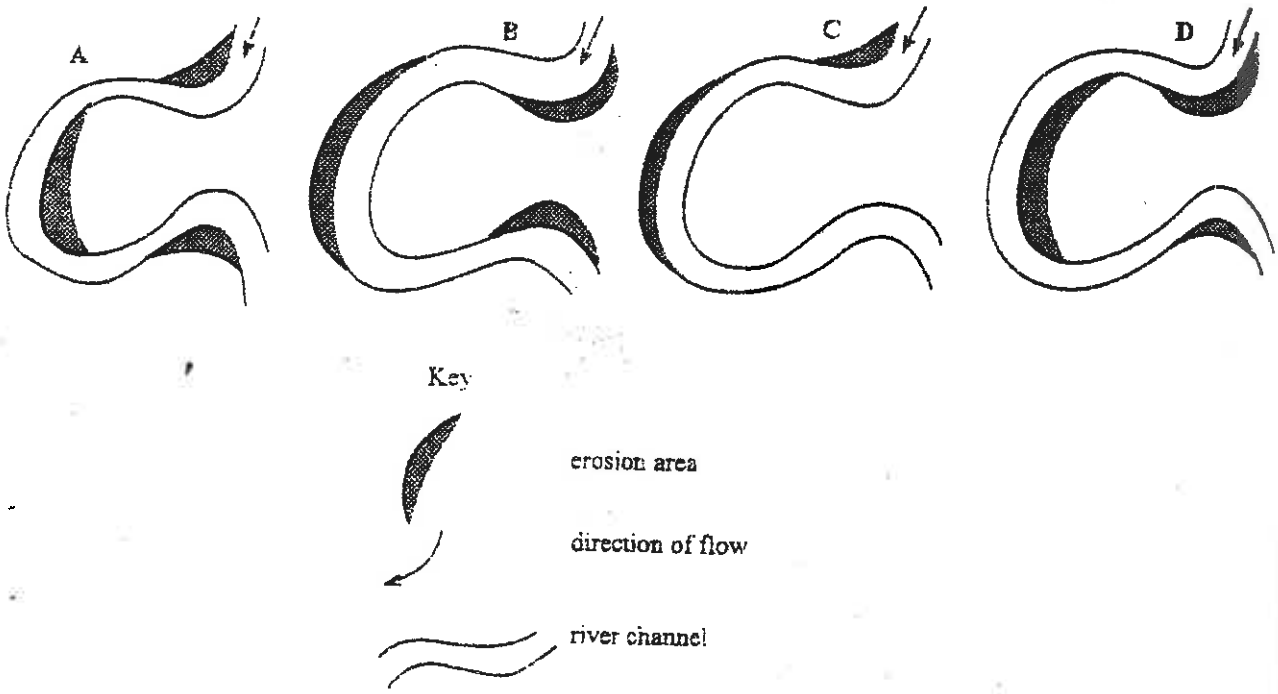


Which of A, B, C or D corresponds with these landforms?

	X	Y	Z
A	ruware	kopje	bornhardt
B	ruware	bornhardt	kopje
C	bornhardt	kopje	ruware
D	kopje	ruware	bornhardt

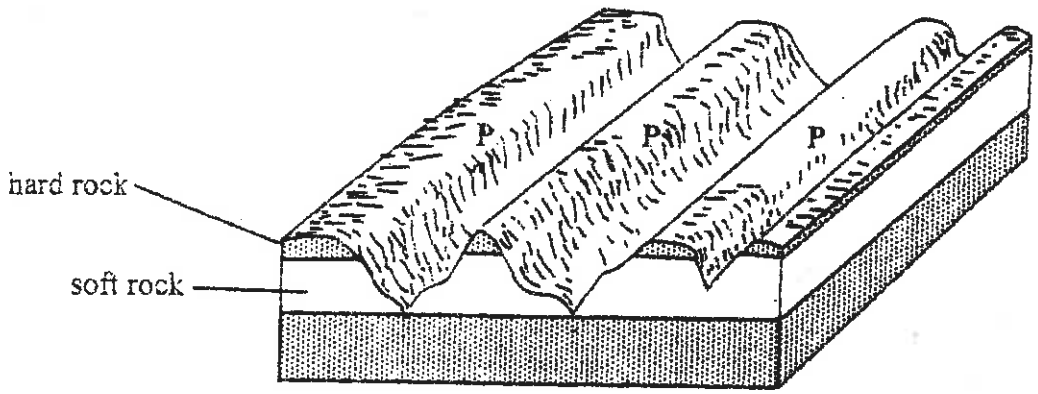
[Turn over

21 Study the diagrams below.



Which diagram A, B, C or D correctly shows bank erosion along a river channel?

22 The diagram below shows a feature produced by wind erosion in arid areas.



The landforms marked P are

A dunes.
B pedestals.
C yardangs.
D zeugens.

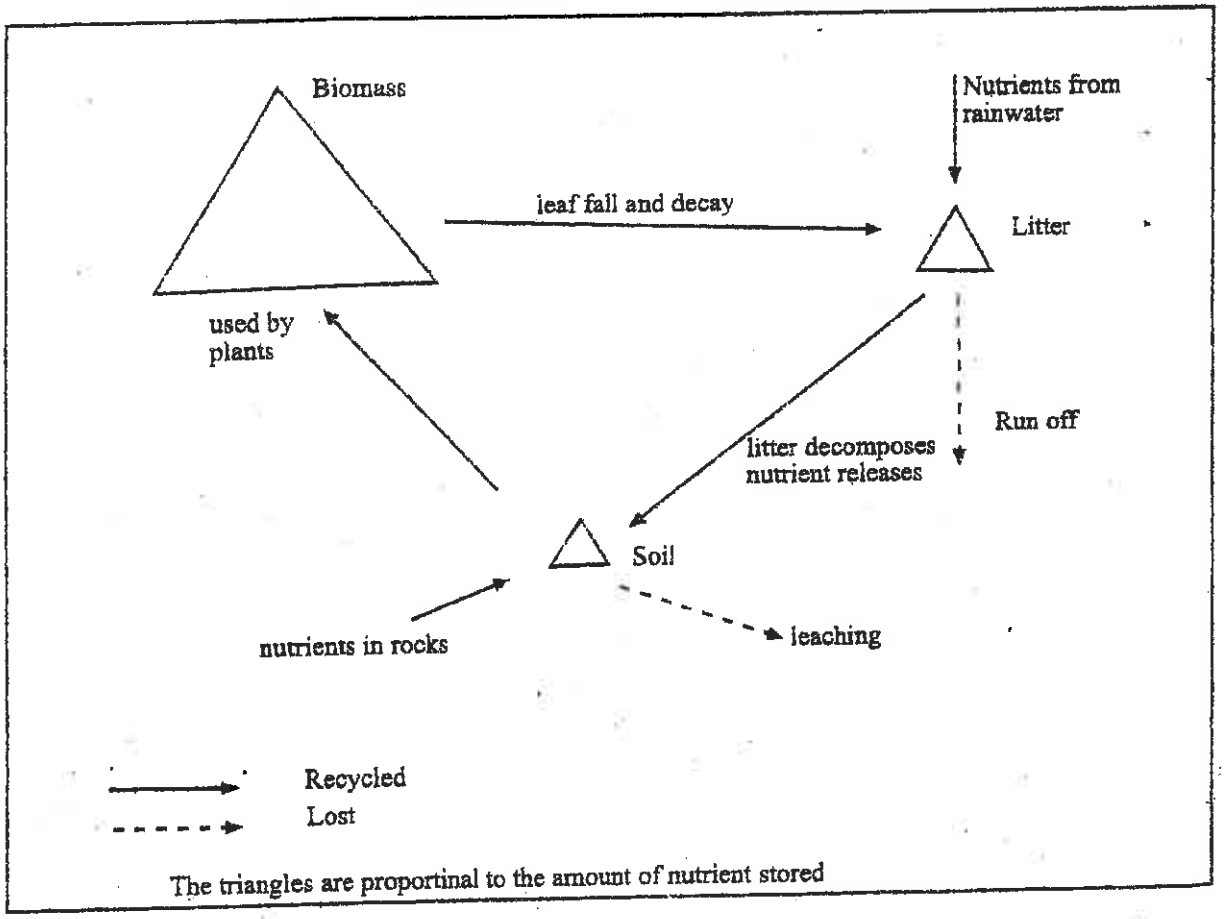
23 A temporary salty lake found in desert areas is called a

A fan.
B pediment.
C playa.
D wadi.

24 The term used to refer to all biological matter is

A biomass.
B biosphere.
C fauna.
D flora.

25 The diagram below shows the nutrient cycle of an ecosystem.



Which ecosystem is represented by the diagram?

A coniferous forest
B savanna grassland
C rain forest
D hot desert

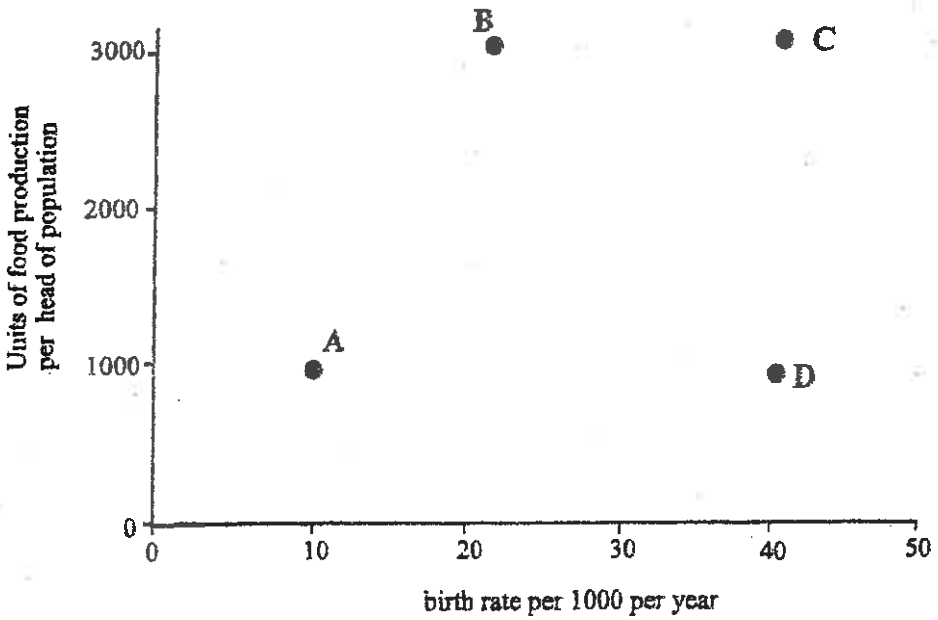
[Turn over

Economic Geography

26 Which of the following resources is non-renewable?

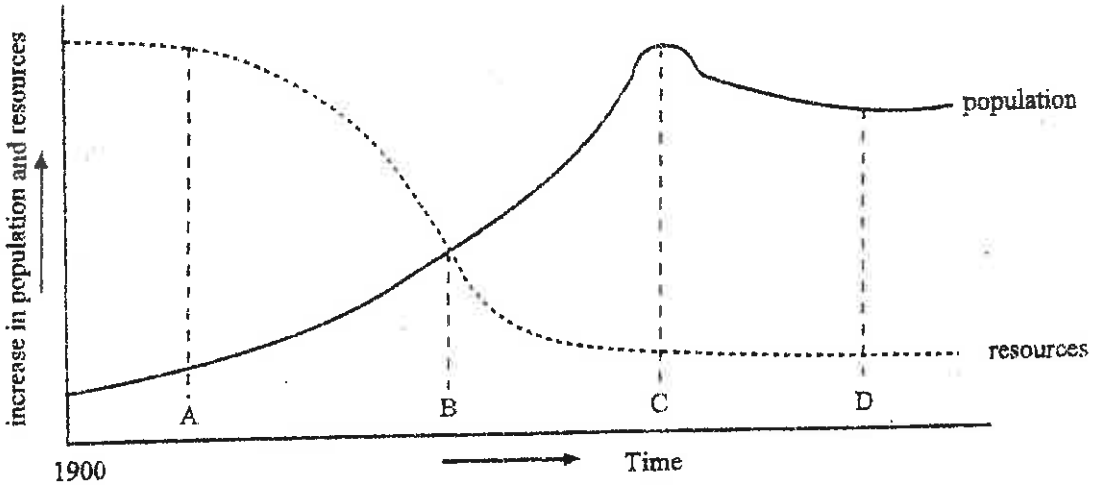
A fish
B petroleum
C timber
D water

27 The diagram shows the units of food production per head of population as well as birth rates for four countries that also have similar death rates. Each country has been asked to accept 100 000 famine refugees.



Which of the countries **A**, **B**, **C** or **D** will be best able to absorb these refugees?

28 The graphs below show the relationship between population growth and resources of a certain country.



At which of the points **A**, **B**, **C** or **D** is population described as optimum?

29 In a farming system, which of the following is a physical input?

A knowledge
B capital
C labour
D rainfall

30 A description of a farming type is given below:
- large capital investment to buy inputs
- small piece of land
- outputs are mainly perishables

Which of the following farming types does the above description refer to?

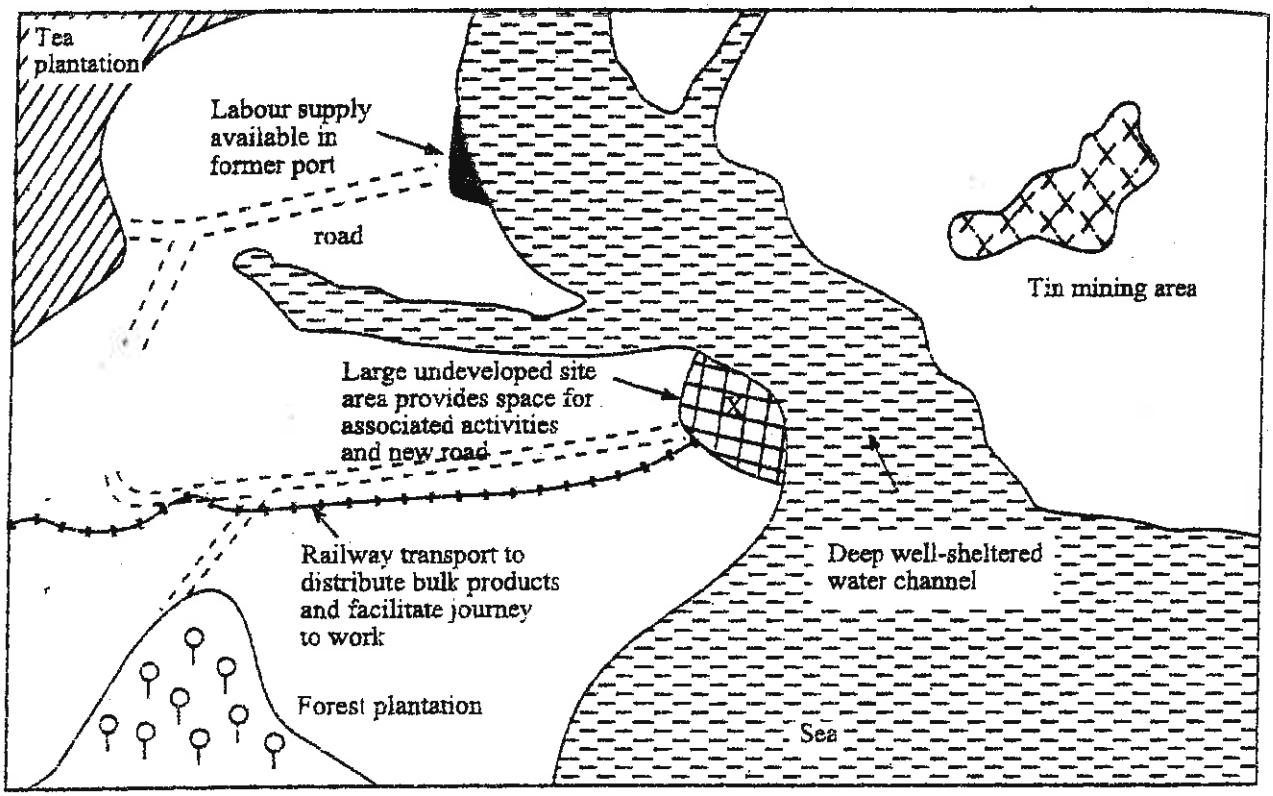
A cattle ranching
B market gardening
C plantation farming
D wheat production

31 Which of the following industries is market-based?

A saw milling
B brewery
C iron and steel making
D oil refinery

[Turn over

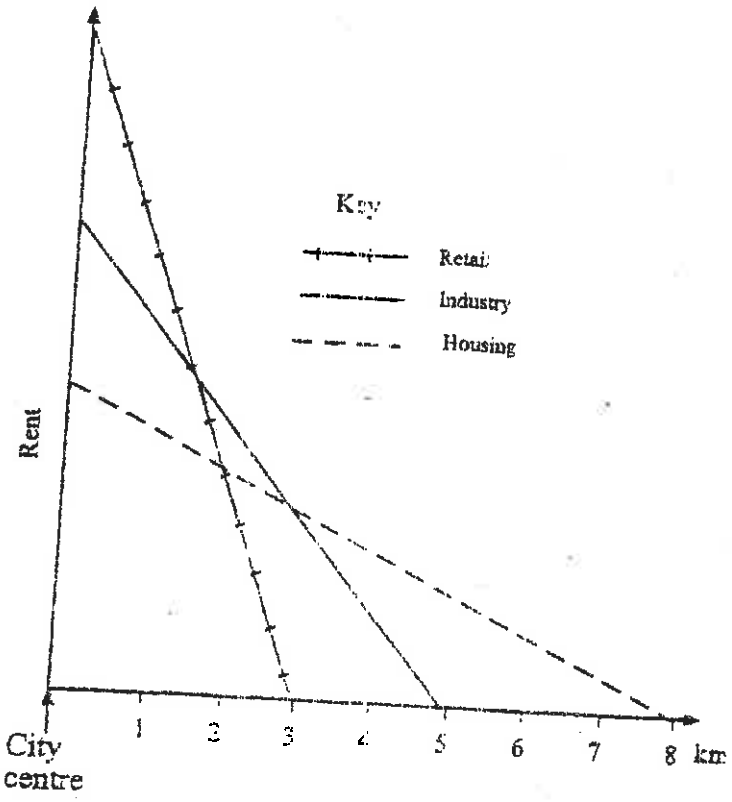
32 Study the map below.



Which of the following industries would favourably be sited at X?

A iron and steel
B car assembly
C saw milling
D tea processing

33 The graph below shows the relationship between the rent of land and distance from the city centre.

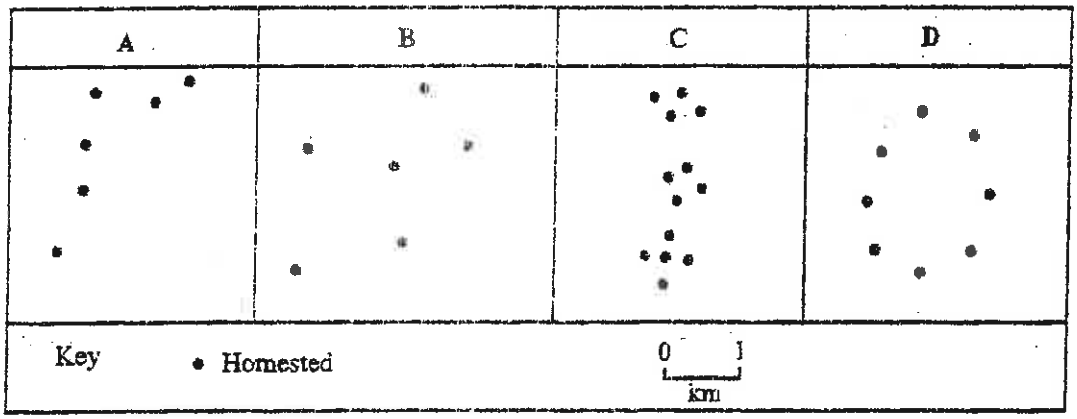


Between which distances is industry the most economic landuse?

A 0 – 3 km
B 1.5 – 3km
C 3 – 5 km
D 3.5 – 8 km

Population, Settlement and Trade

34 The diagrams show patterns of homesteads in an area.



Which pattern A, B, C or D will be the most expensive for the provision of piped water?

35 An extensive built-up area formed by the joining together of once separate urban settlements is referred to as a

A capital city.
B conurbation.
C primate city.
D metropolis.

36 The table below shows the percentages of people starving in four developing countries.

Country	Urban (%)	Rural(%)
A	28	50
B	15	48
C	40	48
D	15	35

If you were a World Food Programme representative, which of the countries A, B, C or D would you target first for assistance?

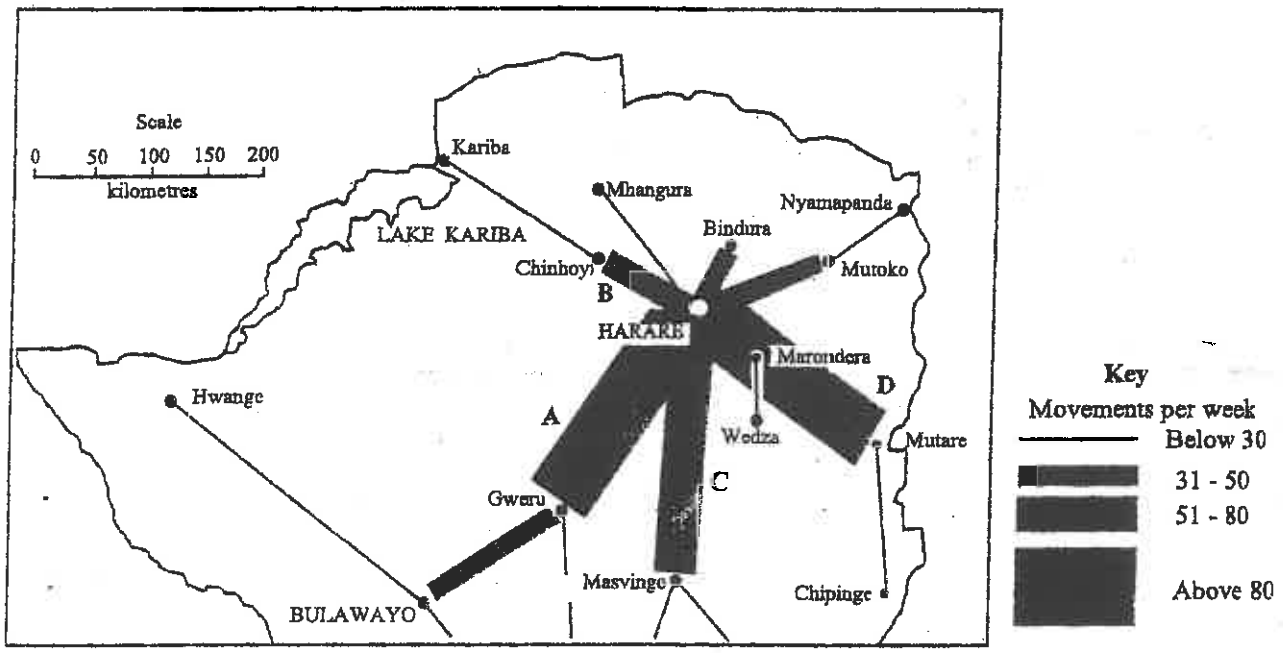
37 Study the photograph below taken from a town in Zimbabwe.

Acknowledgement: K.L. Matongera

Which of the following diseases would spread as a result of the situation shown?

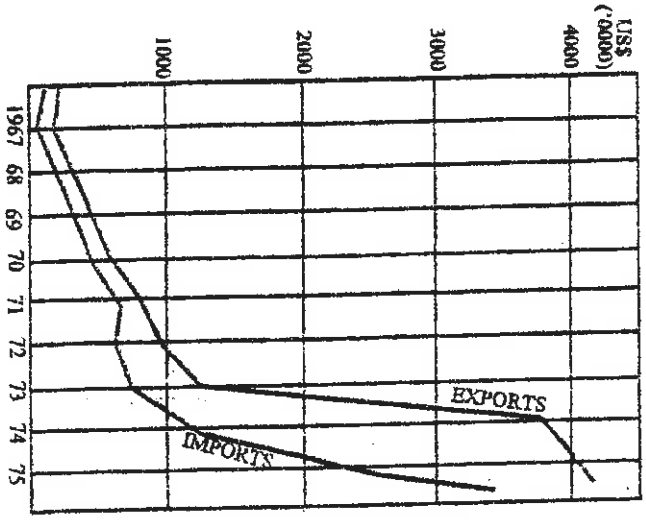
A malaria and diarrhoea
B sleeping sickness and typhoid
C kwarshiokor and polio
D Aids and river blindness

38 The map below shows bus movements to Harare.



Which of the routes **A**, **B**, **C** or **D** is the busiest?

39 Study the graph below showing Nigeria's balance of trade between 1967 and 1975.



In which year did Nigeria experience the most favourable balance of trade?

A 1967
B 1972
C 1973
D 1974

40 A port to which goods in transit are brought for temporary storage and re-export is referred to as

A a harbour.
B a seaport.
C an entrepot.
D a road port.

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY 2248/1

MARKING SCHEME JUNE 2009

1	B	21	B
2	B	22	D
3	D	23	C
4	C	24	A
5	D	25	C
6	A	26	B
7	C	27	B
8	A	28	B
9	A	29	D
10	D	30	B
11	B	31	B
12	C	32	C
13	C	33	B
14	A	34	B
15	C	35	B
16	D	36	C
17	D	37	A
18	B	38	A
19	C	39	D
20	B	40	C

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

GEOGRAPHY 2248/2

PAPER 2

JUNE 2009 SESSION 2 hours 30 minutes

Additional materials:
Answer paper

TIME 2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.
Answer **four** questions.
Answer **one** question from each of Sections A, B and C and **one** other question from any section.
Write your answers on the separate answer paper provided.
If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

This question paper consists of 10 printed pages and 2 blank pages.

[Turn over

Section A (Physical Environment)

Answer at least **one** question from this section.

1 **(a)** Figs. 1A and 1B show two types of plate boundaries.

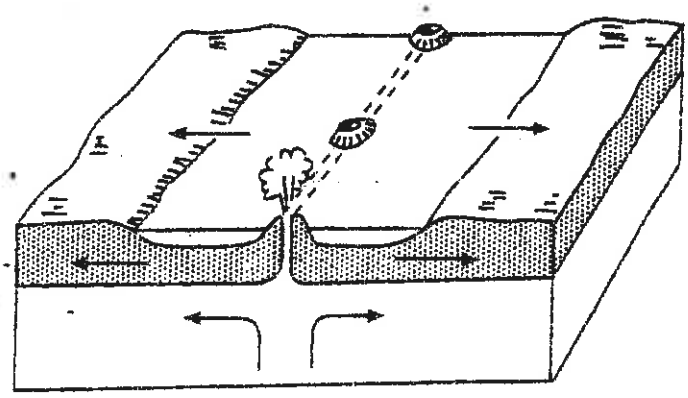


Fig. 1A

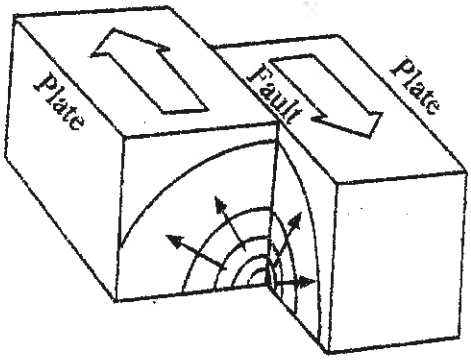


Fig. 1B

(i) Name the type of boundary shown in each of the diagrams. [2]

(ii) Describe the results of tectonic activity at each of the boundaries. [6]

(b) With the aid of labelled diagrams, describe and explain the following types of rock weathering:

(i) frost shattering;

(ii) insolation weathering. [10]

(c) Areas with massive granite rock outcrops offer both opportunities and limitations to human activities. With reference to named areas, discuss the benefits and problems of living in such areas. [7]

2 (a) Fig. 2 shows weekly rainfall distribution for Bulawayo during the 2006 – 2007 season.

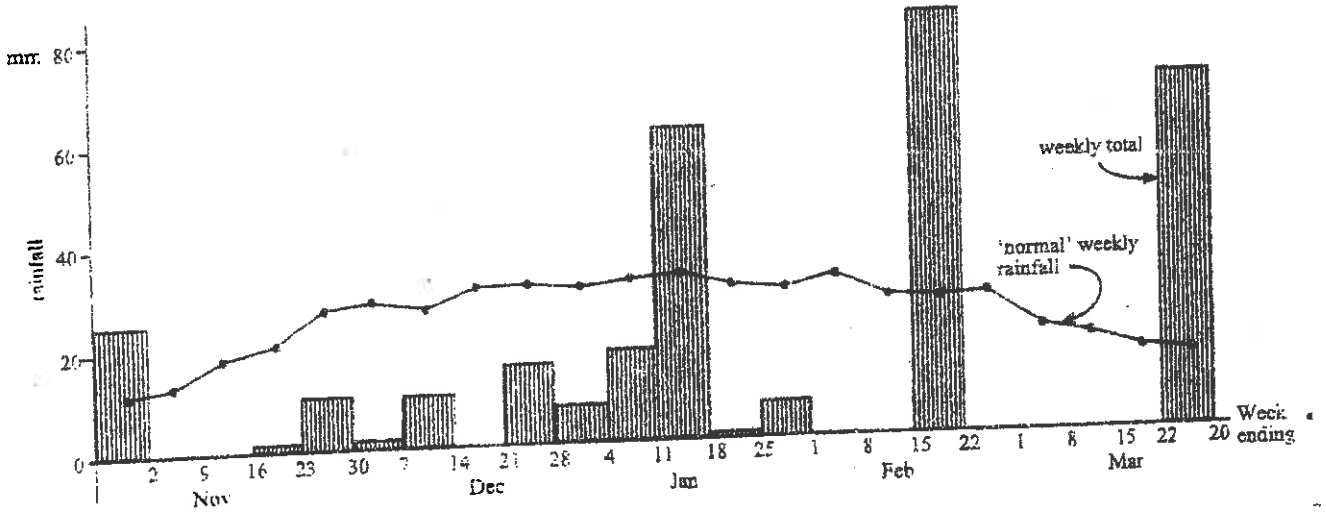


Fig. 2

(i) Describe the rainfall trends shown. [5]

(ii) How can the rainfall pattern shown in Fig. 2 offer both benefits and constraints for the residents of the city? [6]

(b) Southern Africa is frequently affected by tropical cyclones.

(i) Name one country in the area affected by these cyclones. [1]

(ii) Outline the main hazards associated with tropical cyclones. [6]

(iii) What measures can be taken to reduce the impacts of the hazards you have identified in (b)(ii) above? [7]

3 (a) (i) Define the term 'ecosystem'. [2]

(ii) Draw a labelled diagram to show energy flows within an ecosystem. [5]

(b) Fig. 3 shows distribution of vegetation types in Africa.

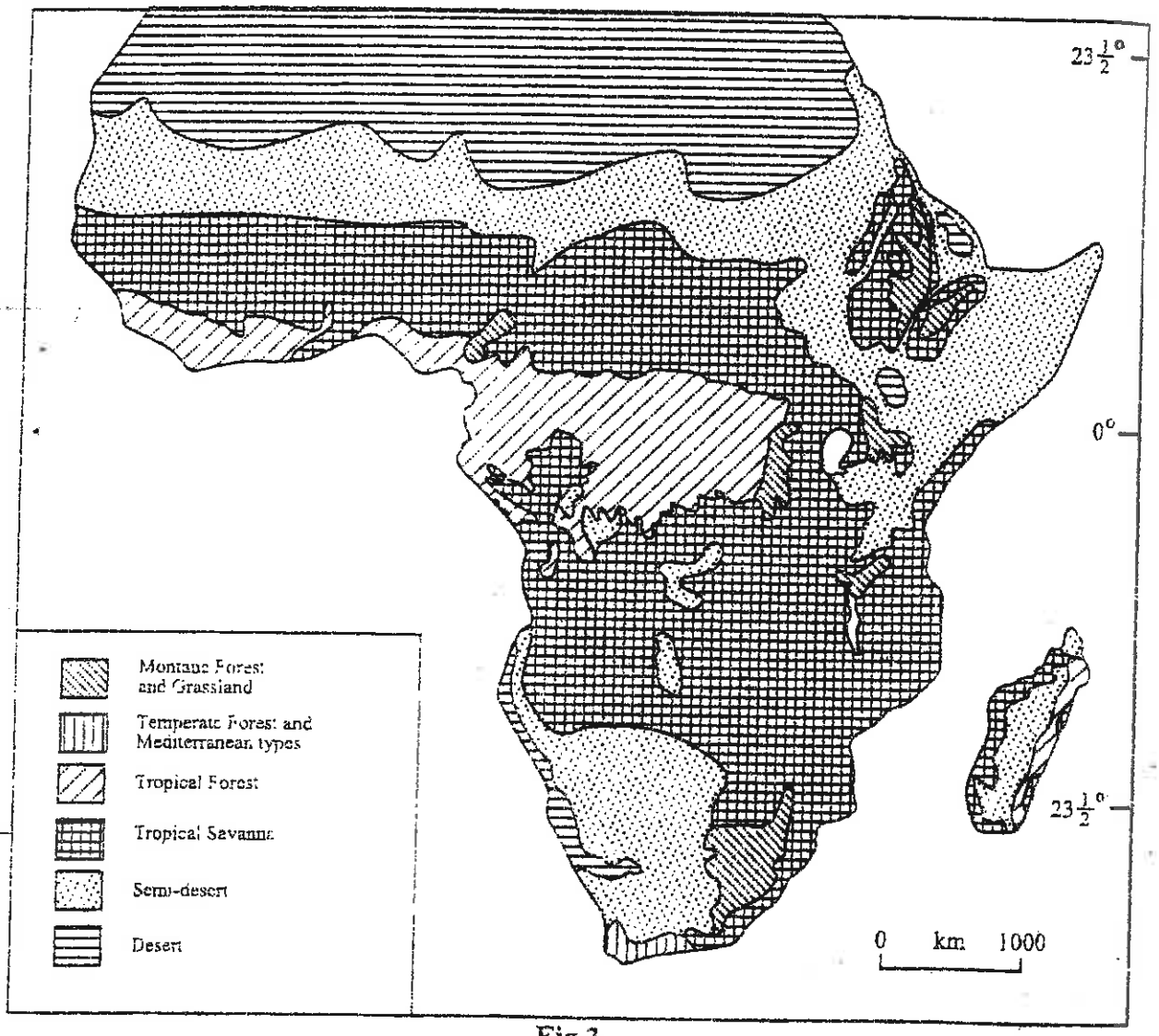


Fig.3

(i) Describe the distribution of tropical savanna vegetation shown in Fig.3. [6]

(ii) Explain the distribution you have described in (b)(i) above. [5]

(c) What arguments can be put for and against the conservation of tropical rainforest areas? [7]

Section B (Economic Geography)

Answer at least **one** question from this section.

4 (a) (i) What is integrated resource conservation? [2]

(ii) With reference to an area you have studied, describe how integrated resource conservation is being done. [5]

(b) Fig. 4 shows an oil producing area.

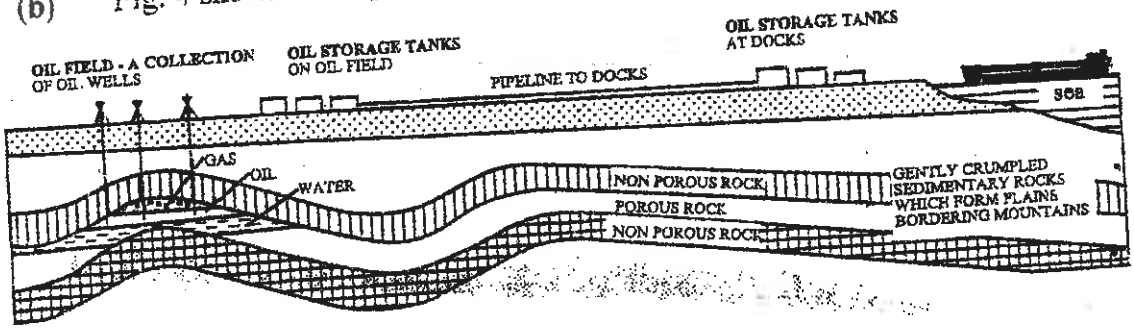


Fig. 4

(i) Describe the oil extraction method shown. [4]

(ii) State **two** oil transportation methods shown in Fig. 4. [2]

(iii) What are the likely environmental problems resulting from the extraction and transportation of oil in the area? [5]

(c) Discuss the advantages and disadvantages of setting up a nuclear power plant in a developing country. [7]

5 (a) Market gardening is a system with inputs, processes and outputs. On your answer sheet, complete the table below.

Inputs	Processes	Outputs
(i) _____	(i) _____	(i) _____
(ii) _____	(ii) _____	(ii) _____
(iii) _____		

[7]

(b) Figs. 5A and 5B show the influence of climate on movement of nomads.

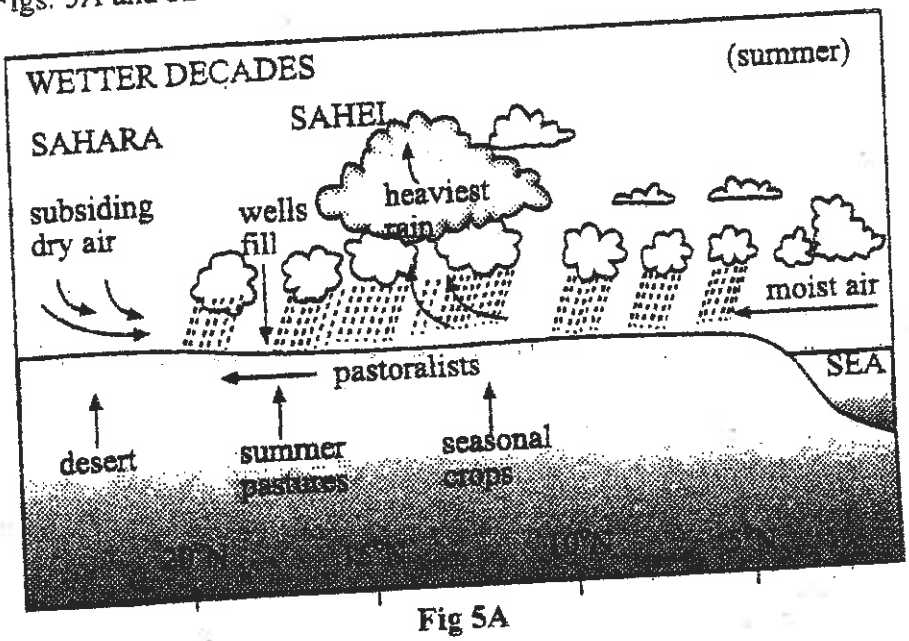


Fig 5A

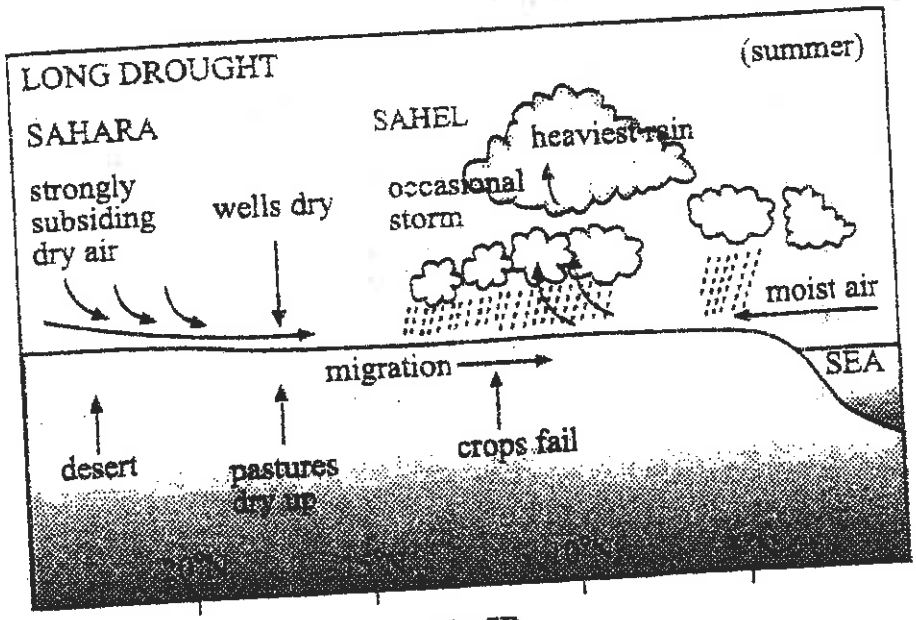


Fig 5B

(i) Using information in Figs. 5A and 5B only, show how climate influences the movement of the nomads. [7]

(ii) What are the impacts of drought on nomadic herding? [4]

(iii) Suggest steps you would take to reduce the effects of drought in your area. [7]

6 (a) (i) What do you understand by the term 'informal industry'? [2]

(ii) Outline **two** advantages and **three** disadvantages of the growth of informal industries in Zimbabwe. [5]

(b) Fig. 6 shows employment structures for a developed and a developing country.

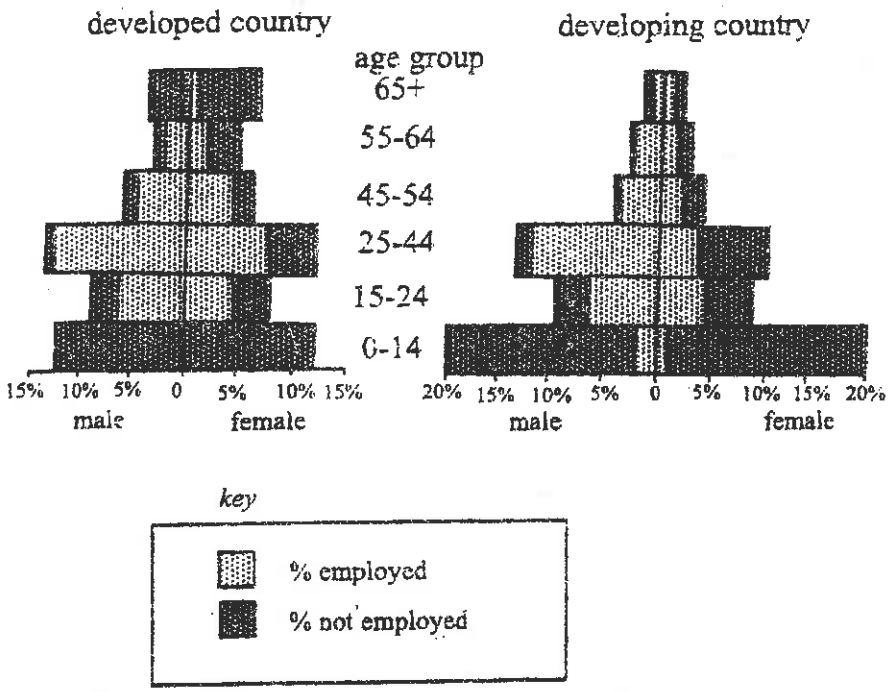


Fig. 6

(i) Identify the differences in the employment structures shown. [7]

(ii) Explain the differences you have identified in (b)(i) above. [4]

(c) An industrialist wishes to set up a large cement and brick-making factory near an area of high population density.

(i) What would be the reasons offered by the industrialist to locate there? [3]

(ii) What arguments would be given by the residents against the location of the factory? [4]

Section C (Population, Settlement, Transport and Trade)

Answer at least **one** question from this section.

7 (a) (i) Show how a named growth point has improved the quality of life of the people of the area where it is located. [7]

(ii) It has been observed that growth points in Zimbabwe have developed at different rates. Suggest reasons for these varying rates of growth. [7]

(b) Fig. 7 shows changes in population density and housing from the city centre to the edge of the city.

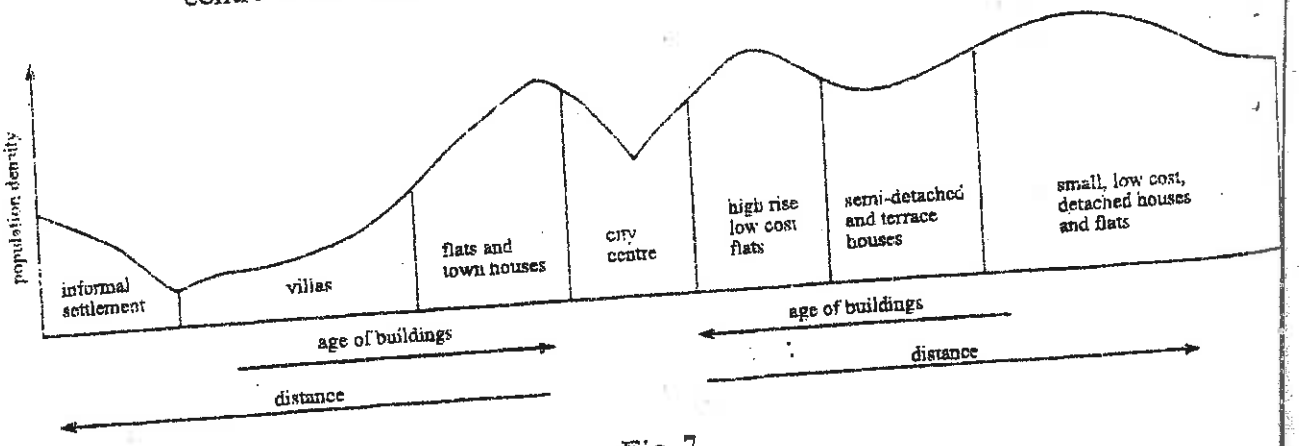


Fig. 7

(i) Describe the changes in population density and types of houses shown. [6]

(ii) Explain the changes you above described in (b)(i) above. [5]

8 **(a)** With reference to named areas, outline the social and economic impacts of rapid population growth. [7]

(b) Fig. 8A shows ages at death for the United Kingdom and Guatemala and Fig. 8B shows the causes of the deaths.

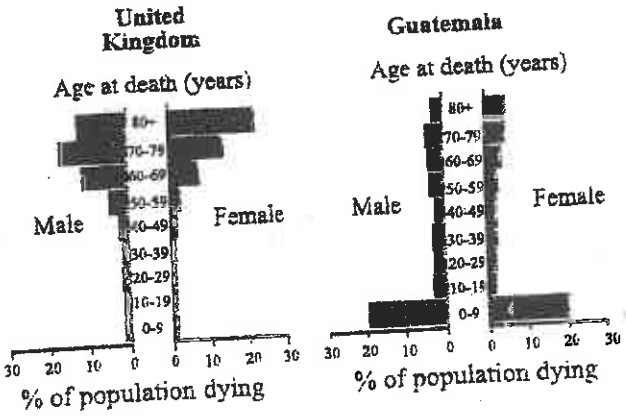


Fig. 8A

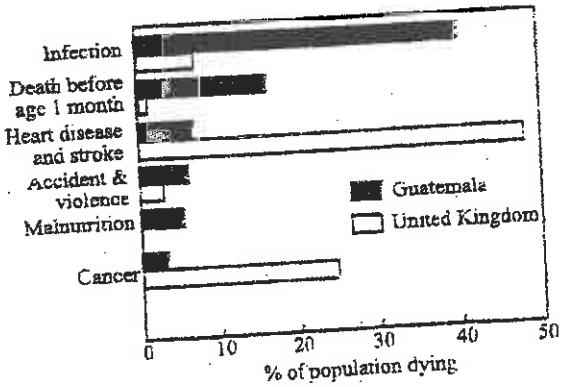


Fig. 8B

(i) Described the differences in the patterns of death shown in Fig. 8A. [6]

(ii) Using Fig. 8B, explain the causes of death for the two countries. [5]

(c) Suggest measures that can be introduced to improve the quality of life in Guatemala. [7]

9 (a) (i) Outline problems being faced by any **one** of the following types of transport in Zimbabwe; road; rail; air. [4]

(ii) State measures to solve the problems you have identified in (a)(i) above. [3]

(b) Fig. 9 shows, in simplified form, Zimbabwe's pattern of trade.

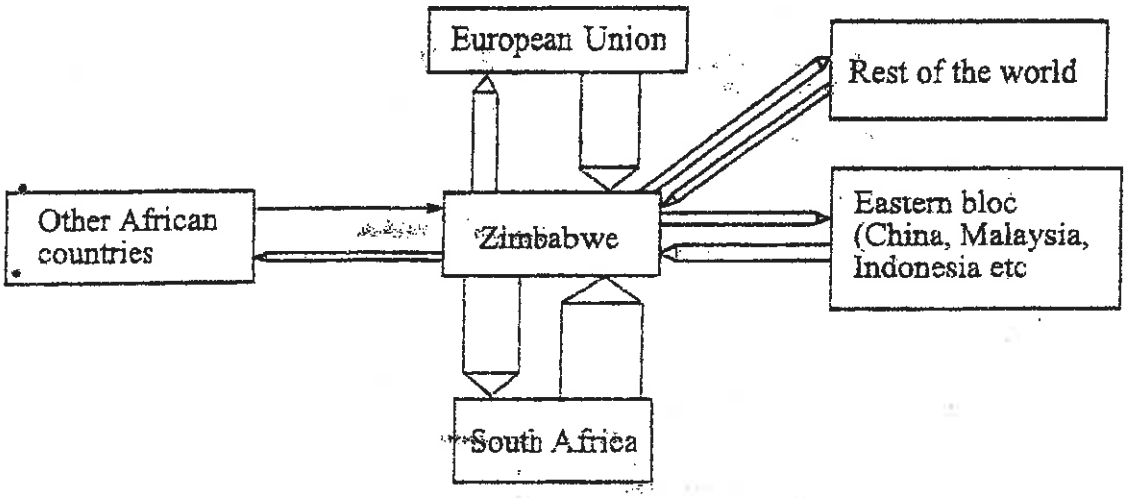


Fig. 9

(i) Describe the pattern of trade shown. [6]

(ii) Give reasons for the pattern you have described above. [5]

(c) As Minister of Industry and International Trade, what steps can you take to promote trade in Southern Africa? [7]

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

POSSIBLE ANSWERS

JUNE 2009

GEOGRAPHY

2248/2

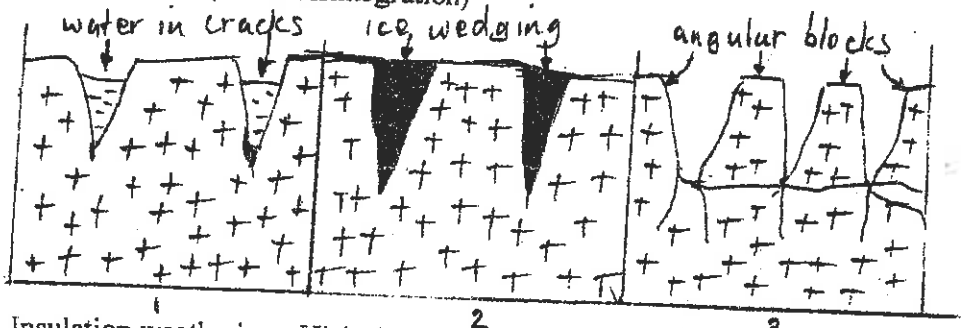
1 (a) (i) A – divergent or constructive plate boundary,
B – neutral or conservative plate margin.
1 mark each [2]

(ii) At A – plates diverge, magma rises to fill gaps created, formation of volcanoes, mid –oceanic ridges, new ocean floor or ocean floor spreading.

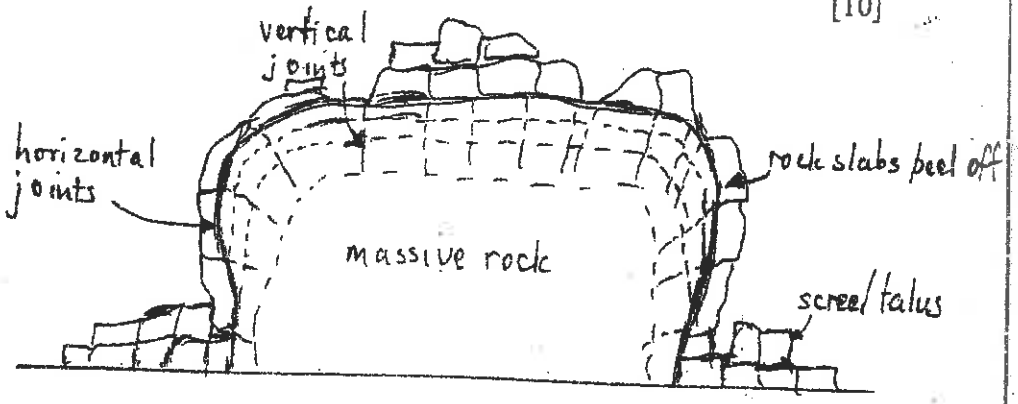
At B – plates slide past each other. Friction between moving plates builds up pressure. Fracturing of crust results in sudden release of pressure in form of seismic waves (earthquakes). Cracking of the ground, lateral displacement of land and deformation of land occurs. , collapsing of buildings, displacement of infrastructure
Max. 2 marks for earthquakes.

3 marks each. 1 mark each point [6] [8]

(b) (i) Frost shattering
Daily fluctuations of temperature between – 5°C and 8°C result in freeze – thaw cycles. During the day water collects in rock joints. When temp drops at night water freezes and volume increases. Cracks get wider and deeper. Ice thaws during the day. Repeated freeze – thaw action breaks rocks into angular pieces (block disintegration)



(ii) Insulation weathering. High daytime temps cause the surface of exposed rock outcrops of expand. Different rock elements expand at different rates. This creates stress with the rock. Temps drop at night or due to sudden cooling following a rainstorm, rocks contract. Repeated expansion and contraction causes exfoliation (peeling/ flacking of rocks) or granular disintegration.
[10]



1 mark each point. 5 marks each. Res. 2 for diagrams (each). Well annotated diagrams may earn 5 marks. Mark diagram first.

(c) Name: Matopos. Domboshawa. Domboramwari, Balancing rocks in Epworth

Opportunities
- scenic attraction promotes tourism
- varied habitats promote wildlife
- building materials e.g. quarry stones for buildings (construction), road construction.
-black granite for tombstones, curios
- foreign currency earnings through export of black granite
- water harvesting etc
- traditional ceremonies, drying grain, recreational activities e.g. rock climbing
- education

Problems
- rugged terrain – problems of road construction etc
- limited flat land for farming and settlement
- skeletal soils with a low agricultural potential
- hazardous rocks mass movement
- high rates of soil erosion
- habitat for nuisance animals
  e.g. baboons and dangerous reptiles.

1 mark for name; 3 marks P; 3 marks O [7] [25]

2 (a) (i) Bulawayo
- rainfall distribution more erratic/uneven distribution
- rainfall is generally below normal
- four periods above normal
Oct – 2 Nov, 11 – 18 Jan, 15 – 22 Feb and 22 – 29 March
- Two long dry spells 1 – 15 Feb and 22 Feb to 22 March etc

1 mark each. Refer to diagram [5]

(ii) Benefits
- growing of crops
- dry festive season
- water harvesting during weeks of high rainfall
- risk of flood in the city is reduced
- low risk of water-borne diseases e.g. malaria

Constraints
- possible soil moisture deficits
- wilting of crops and reduction in water supplies during the long dry spells
- flash floods during weeks of above normal rainfall
- water rationing
- diseases related to water shortage

3 marks each; 1 mark each point [6] [11]

(b) (i) Southern Malawi, Zimbabwe, Mozambique or South Africa [1]

(ii) Hazards associated with tropical storms
- heavy rains resulting in severe flooding
- lighting strikes result in loss of lives
- strong winds destroy buildings and communication infrastructure

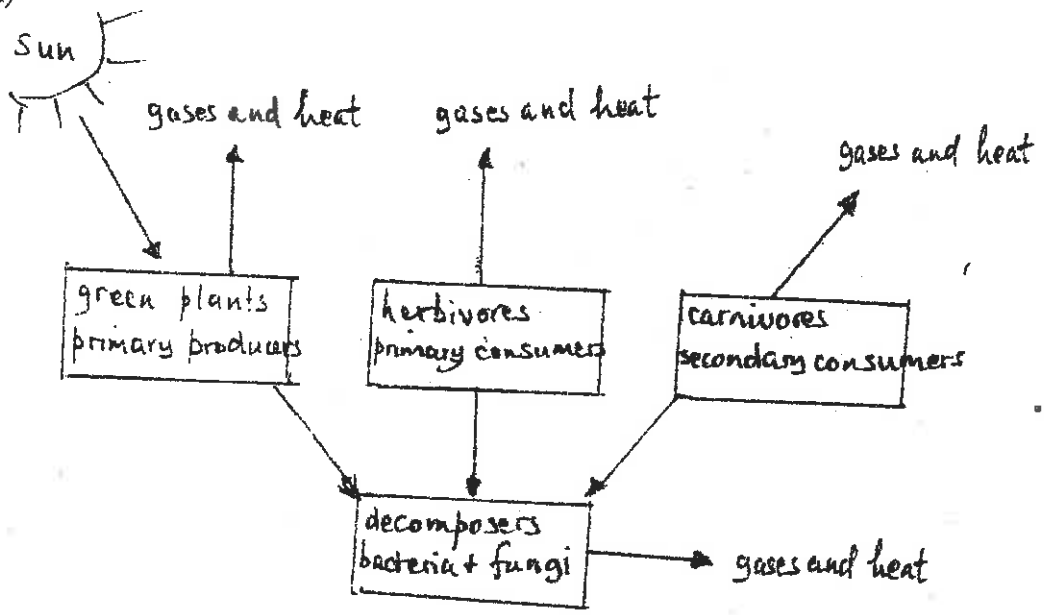
- Secondary effects
- loss of farmland
- loss of life, flooding of field, disease, destruction of vegetation, injuries etc. 1 mark each [6]

(iii) Measures
- mitigation (disaster aid (max. 2 for food, water, shelter, clothing, medicines and insurance)
- settling on high ground
- weather forecasting and early warning systems
- rescue and recovery teams/evacuation
- lighting conductors and education
- improved drainage etc.
- reinforce buildings
- dam construction
- afforestration/reforestation

1 mark each [7] [25]

3 (a) (i) An ecosystem is a community of living things sharing a certain physical environment/ecosystems are made up of linked parts which all depend on each other. 2 marks for a complete answer. [2]

(ii)



1 mark each main level [5]

(b) (i) Distribution of tropical Savanna vegetation
- vegetation is found between tropical rainforest and semi desert areas
- extends from about 15°N to 23°S
- narrow zone along the Natal Coast extends down to 30°S
- forms a continuous belt from West Africa to East Africa, North of Ghana and Nigeria

- covers much of Central and Southern Africa, e.g. Zambia, Zimbabwe, Angola, Mozambique
- an isolated area in the Sudan
- narrow belt on western Madagascar

1 mark each
Credit ref to named countries
Refer to map [6]

(ii) Reasons for distribution
- seasonally humid conditions within the hot tropical zone
- highland areas in Sudan promote high rainfall
- higher rainfall and warm conditions associated with the warm Mozambique current along the Eastern coast account for the extensions of the belt to beyond tropical regions etc
- reduction in rainfall latitudinally from the Equator etc.
- dryness associated with the cold Benguela current of S.W. African Coast

1 mark each [5]

(c) Arguments for conservation of the rainforest
- preservation of biodiversity and gene bank or the rain forest is a habitat for a wide variety of plants, animals, birds, reptiles etc.
- reduction in levels of CO^2 and slowing down of the process of global warming
- rainforests are a vital component of the global hydrological cycle
- increased evapotranspiration will result in increased rainfall
- many plants have medical value
- protection/preservation of cultural heritage of minority groups living in the rain forest e.g. Ameri-Indians
- forests have an aesthetic value
- promotion of ecotourism
- source of food (fruits and honey)
- protection against soil erosion
- maintaining the nutrient cycling
- source of timber

Against
- need to provide land for the fast growing populations in tropical areas
- plantation crops and hardwood timber bring foreign currency
- exploitation of timber and promotion of agriculture can stimulate industrial growth within the countries
- large scale arable farming and ranching can improve local food security
- resource exploitation (timber, minerals etc) can promote infrastructure development
- and the subsequent reduction in remoteness
- sustainable exploitation of the rainforest can improve the quality of life.

Res 3 for F/A 1 mark each [7][25]

4 (a) (i) Integrated resources conservation is a holistic approach to the conservation of the resources of an area i.e/.conserving all existing resources in an area for sustainable use
2 marks for a complete answer. [2]

(ii) Integrated resource conservation can cover any of the following

- a named river basin/water shed projection,
- Campfire projects, conservancies,
- local community projects etc

} 1 mark

Key aspects to be included are
- holistic nature of projects
- grassroots participation
- education of locals to raise level of resource management awareness
- benefits from projects benefit local communities
- empowerment of local communities in decision-making
- funding from government and NGOs
- carrying out of environmental audits

Specific measures include
- enforcing environmental protection laws
- afforestation and reforestation (village woodlots-one word please)
- dam construction; fish farming
- water harvesting
- setting up of fire breaks
- destocking
- landuse planning
- setting up local anti-poaching units
- setting up Campfire projects, etc
- regrassing.

No name – max. 3 1 mark each [5]

(b) (i) Extraction of oil
- wells are drilled/sunk through layers of rock
- pumps are installed
- pumping equipment is supported by derricks
- pumping is done through the core pipe
- waste gases are set alight
- outer casing supplies mud to cool the core 1 mark each [4]

(ii) - pipeline and tanker/ship 1 mark each [2]

(iii) Environmental impacts of oil extraction and transportation
- devegetation during infrastructure development
- gas flares pollute the air
- negative visual impacts of derricks and storage tanks
- land pollution from pipeline leakages
- oil spills from tankers pollute water resulting in upsetting of marine ecosystems
- dredging of coast to set up harbour etc. 1 mark each [5]

(c) <u>Advantages of a nuclear plant</u>
- high energy output from small quantities of raw materials
- reliable energy source leading to economic prosperity
- reduction in the importation of oil and gas (foreign currency savings)
- less problems of green house gases
- plant has a longer life span
- other sideline benefits e.g. laser technology

Disadvantages
- problems of disposal of radioactive waste
- it's expensive
- high technology is required
- lack of skilled manpower
- possible misuse of nuclear power for military purposes
- high risk of industrial accidents leading to loss of life and contamination of large areas
- possible conflicts with other countries

1 mark each Res 3 for A/D [7][25]

5 (a)

Inputs	Processes	Outputs
- water	- weeding	- vegetables
- fertilisers	- harvesting	- fruits
- irrigation pipes	- spraying	- flowers
- capital	- transporting	- pumpkins
- labour	- ploughing	
- chemicals		
- seed /3	/2	/2

[7]

(b) (i) Wet decades
- general movement northwards
- rainfall belt extends from 5°N to 20°N
- farmers migrate northwards as water and pasture are readily available

Drought periods
- general movement southwards
- rainfall belt restricted to between 5°N to 15°N
- pastures are dry
- wells dry
- farmers migrate southwards as area of rainfall is retreating [7]

1 mark each

(ii)
- loss of livestock
- water scarcity
- severe food shortages
- starvation
- people die
- reduction in quality of life
- outbreak of diseases
- loss of income and status
- shortage of pastures
- crops fail

1 mark each [4]

(iii)
- water rationing
- supplementary feeding
- sinking deeper wells
- dam construction
- introducing irrigation schemes for crops and pastures
- introducing sustainable ranching
- encourage farmers to destock
- banning the use of hose pipes
- use of recycled water in gardens

- strategic grain reserves
- food aid
- growing drought tolerant crops
- keeping drought tolerant animals
- education
- importation of food

1 mark each [7][25]

6 (a) (i) Informal industries:
Backyard or home industries and on a small scale
2 marks for a complete answer. [2]

(ii) Advantages
- trading is flexible
- supply cheap goods to the market
- business can be conducted from a variety of places
- prices are rarely fixed and so negotiation is possible
- a variety of cheap raw materials used
- self-employment/viable source of income
- employment creation
- land/air pollution [2]

Disadvantages
- quality of goods not guaranteed
- exploitation of child labour
- operation is often illegal/backyard
- encourages "dealing" in stolen goods
- limited benefit to the economy as business people do not pay income tax
- negative visual impacts of some operation sites
- land/air pollution [3]

(b) (ii)
- no children employed in developed country whereas approx 3% of children in developing countries are employed
- fewer women employed in developing country than developed
- more aged people in developed country are unemployed than in developing
- 15 – 24-aged group: more men employed in developing country than developed
- 25 – 44-aged group: more women unemployed in developing country than in developed
- 25 – 44-aged group: more males, unemployed in developing country than in developed
- 45 – 55 age group: more unemployed males in developed country
- 55 – 64 age group: more unemployed females in developed country

1 mark per clear difference. Refer to graphs [7]

(ii) Children: - too many in developing country; child labour laws weak
15 – 24/25 – 44 : child bearing; culture; low levels of development; women not liberated in developing country and liberated in developed country.
45 – 55 automated machines in developed; more menial jobs in developing;
1 mark each point [4]

(c) (i)
- employment creation
- supply of building materials at affordable prices
- infrastructural development
- cheap land
- large labour pool
- large market

[3]

(ii)
- environmental pollution
- exploitation of labour
- target market not always the local community
- taking up of land for agriculture
- environmental degradation
- air pollution
- noise pollution

[4][25]

7 (a) (i) Name of Growth Point
- Maphisa, Mubaira Murambinda etc — 1 mark for name [1]
- easy access to goods and services
- marketing of agricultural produce
- rural electrification
- upgrading of district hospitals
- employment creation
- improvements in transport/accessibility
- improvements in water supply
- construction of modern homes
- improvements in entertainment, etc — 1 mark each [6]

(ii) Reasons for differential rates of growth
- slow growth due to:
- poorly developed infrastructure e.g. roads, power supply, water and telecommunications
- lack of resources for economic development
- small domestic market/long distances from major markets
- poorly sited growth points -- i.e. growth points overshadowed by small towns e.g. Murombedzi
- shortage of land for expansion/conflict over land with local communities e.g. Murambinda
- failure to attract potential investors
- political interference

Reasons for fast growth
- rich resource base in the hinterland land promoting growth of processing industries e.g. Sanyathi and Gokwe
- incentives offered to property developers e.g. cheap land (home ownership) Mupandawana
- more reliable water supplies
- better developed transport networks and proximity to urban markets e.g. Murehwa centre.

Res 3 for S/F 1 mark each [7]

(b) (i) Descriptions
City centre has low population density
- density decreases from city centre to the edge of the city
- there is a high density rim around the city centre

- higher density to the east (right side) than to the west
- population density increases sharply in the informal settlement
- oldest buildings are closest to city centre
- blocks of flats on either side of the city centre
- villas on the western side (left)
- density increases around the zone with small detached houses on the right etc

Credit ref. to any correct observation - Res 2 for P/H
- Refer to diagram 1 mark each [6]

(ii) Explanations
- CBD – non-residential functions
- newer buildings towards the edges of the centre due to outward expansion of the city
- old buildings near the city centre represent old developments when the town was small
- high density rim due to high rise apartment buildings which accommodate many people as well as need by many people to stay near CBD and work places and also due to high land values
- high density on the zone of the work men's homes high density housing accommodates many people.
- villas away from city centre because land is available/cheaper
- informal settlement at the edge of the city and near high class residential area for proximity to menial jobs and availability of open land
- high density in informal settlement because plots are very small
- informal settlements might have developed on the rural urban fringe and settlers require land for limited cropping and access to wood fuel
- presence of squatter settlement

1 mark each explanation [5][25]

8 (a) Name - 1 mark for country/region

Social – high birth rates – poor maternal health
- possible high infant mortality rates
- strain on social services (health, education and housing)
- crime and all forms of anti-social behaviour
- poverty
- overcrowding
- destitution
- diseases spread faster
- malnutrition

Economic – unemployment
- out-migration (rural to urban)
- shortage of skilled manpower
- rapid exploitation and depletion of resources
- economic stagnation due to increased govt spending on non-productive sectors
- availability of a large pool of cheap labour

1 mark each Res. 3 S/E [7]

(b) (i) - generally more deaths of older people in UK, more deaths of younger people in Guatemala
- fewer deaths in UK of people in the 0 – 49-year age group
- 10 – 19 years small difference with 0 – 9 in UK whereas a sudden drop in Guatemala
- 20 – 49 years very small increase in death in UK, almost uniform in Guatemala
- 70-79 more male deaths in UK, almost the same for male and female in Guatemala
- 49 – 79 years rapid increase in deaths in UK, less rapid in Guatemala
- 80– more females die in UK than males; smaller difference between male and female deaths in Guatemala. 1 mark each difference [6]

(ii) UK – highest is stroke and heart disease due to stress and old age
- second killer in cancer
- less death from infection due to more developed medical facilities and good diets
- no deaths from malnutrition due to better diets
- low death before age 1 month because of developed antenatal care

Guatemala:
- highest killer is infection due to poor medical service delivery
- death before age 1 month high; poor baby clinics development
- accidents and violence fairly high; drug barons, unrest
- malnutrition deaths high poor diets due to poverty
1 mark each. Res 2 for UK Guatemala [5]

(c) - improvements in sanitation
- provision of safe drinking water
- use of pesticides to reduce diseases like malaria
- education to increase literacy levels
- training of doctors and other health personnel
- immunisation of children
- primary health care
- improvements in personal hygiene
- improvements in agriculture to increase food supply
- legislation to ban some cultural practices
- family planning
- empowerment of women
1 mark each [7] [25]

9 (a) (i) Transport problems - Road
- poor state of roads e.g. potholes
- shortage of spare parts
- shortage of forex to import and maintain vehicles
- inadequate transport and long waiting periods
- congestion on roads
- overcrowded public transport
- frequent breakdown due to shortage of spares
- high cost of commuting
- shortage of parking space
- poor state of roads worsened by state of weather
- frequent accidents

Transport problems – Rail
- shortage of rail wagons
- shortage of spare parts e.g. vacuum brakes
- faulty and non-functioning signals
- shortage of fuel
- shortage of skilled manpower
- outdated machinery
- slow and unreliable
- vandalism and damage of the rail track and signals
- poor maintenance of the rail track
- operating at low unprofitable cost.

Transport problems – Air
- serious shortages of manpower
- old and outdated planes
- few planes
- shortages of foreign currency
- competition from other airlines
- too much political interference
- frequent industrial actions or wage disputes
- with the exception of Harare, airports have limited capacity
- unreliable and delays 1mark each [4]

(ii) Measures to solve the problems
- increased funding for fuel importers
- local manufacture of spare parts
- regulation of fares
- installing traffic lights
- local assembly of cars, buses, rail wagons
- use of public transport
- improvement of road and rail infrastructure
- legislation and education on vandalism of signals
- making foreign currency available for the importation of spare parts. 1 mark each [3]

(b) (i) greatest flow of goods and services is between Zimbabwe and SA, followed by Zimbabwe and EU countries
- significant trade with the Eastern Bloc
- least with other African countries
- trade with the rest of the world and other African countries is insignificant
- generally Zimbabwe imports more than it exports (trade deficit situation)
- Zimbabwe exports more to African countries than it imports

1 mark each [6]

(ii) Reasons
- South Africa has a powerful and more diversified economy
- proximity to S.A. and signing of trade protocols between the two countries, allows for easy movement of goods and services

E.U. countries
- historical reasons or colonial legacy
- strong links with UK and significant investment by European TNCs