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ZIMBABWE SCHOOL EXAMINATIONS COUNCIL
General Certificate of Education Ordinary Level

GEOGRAPHY

4022/2

PAPER 2

JUNE 2019 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 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 16 printed pages.

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Section A (Physical Environment)
Answer at least **one** question from this section.

1. a) With the aid of a diagram describe the internal structure of the earth. [7]
- b) Explain the formation of a horst or block mountain. [7]

Fig. 1.1 shows a plate boundary.

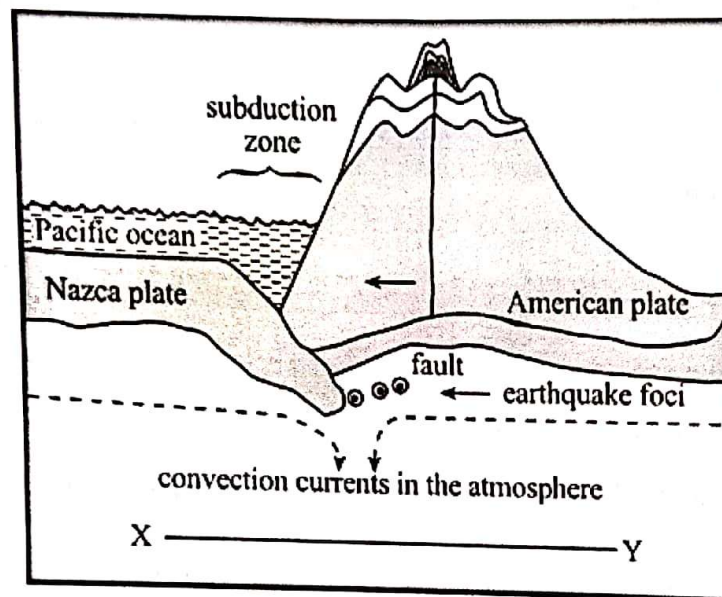


Fig. 1.1

- c) Identify the type of plate boundary and the resultant landforms shown. [4]
- d) How would you evacuate and manage earthquake victims? [7]

2. a) i) Identify factors that influence the location of a school weather station. [3]
 ii) Explain the characteristic of a Stevenson screen. [4]

Fig 2.1 below shows the distribution of the Savanna climate in the world.

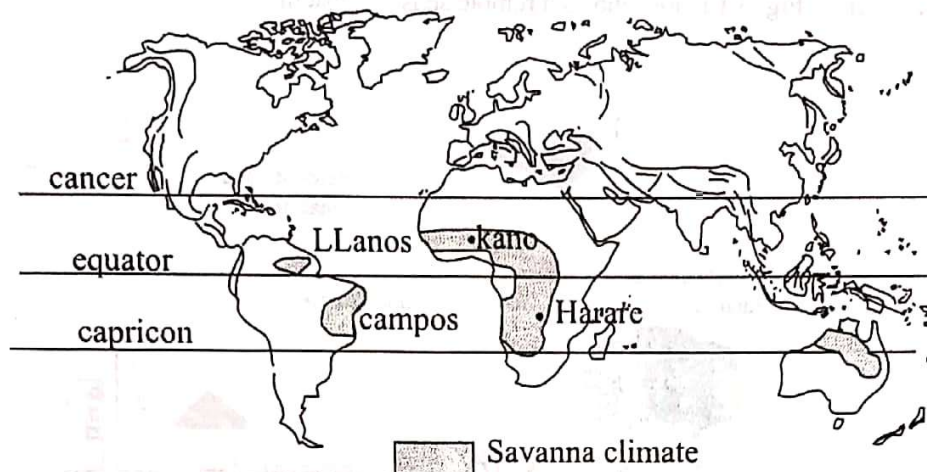


Fig 2.1

- b) Describe the distribution of Savanna climate shown. [5]
 c) Fig 2.2 below shows an occluded front

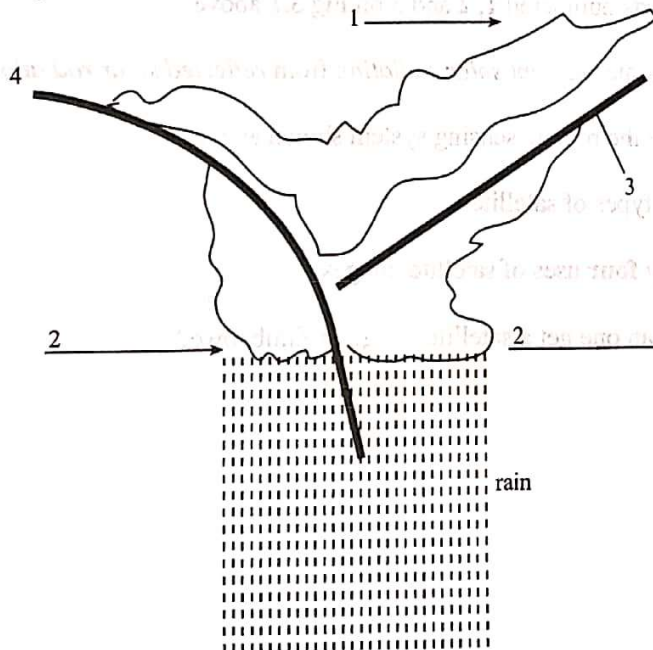


Fig 2.2

- i) Label the features numbered 1, 2, 3 and 4. [4]
 - ii) Outline the weather associated with this frontal system. [2]
 - d) Suggest measures that could be taken during cyclones such as Idai. [7]
3. a) Fig. 3.1 below shows a remote sensing system.

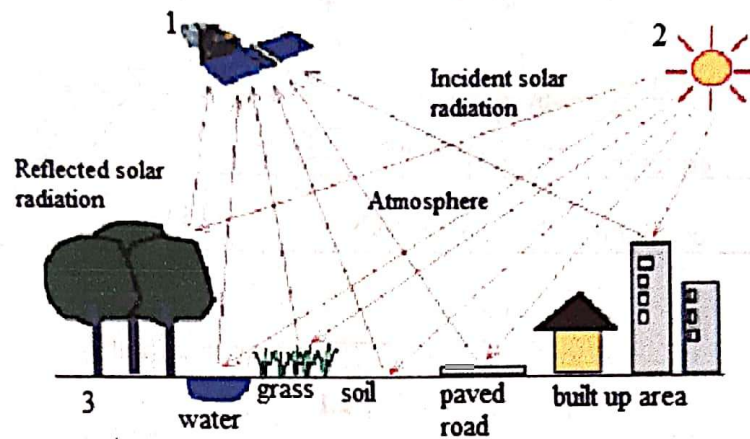


Fig. 3.1

- i) Label parts numbered 1, 2 and 3 on Fig 3.1 above. [3]
 - ii) Differentiate *incident solar radiation* from *reflected solar radiation*. [6]
 - iii) Describe the remote sensing system shown above. [7]
- b) Give the **four** types of satellites. [4]
- c) i) Give any **four** uses of satellite images. [4]
- ii) Where can one get a satellite image in Zimbabwe? [1]

4. a) i) Give any **two** biotic and **two** abiotic components of an ecosystem. [4]
- ii) Outline the uses of soils to people. [3]

Table 4.1 shows organisms in an ecosystem.

| |
|----------|
| elephant |
| bacteria |
| lion |
| trees |
| gazele |
| fungi |
| grass |

- b) Draw a diagram to show their feeding levels. [8]

Fig. 4.2 shows part of a carbon cycle.

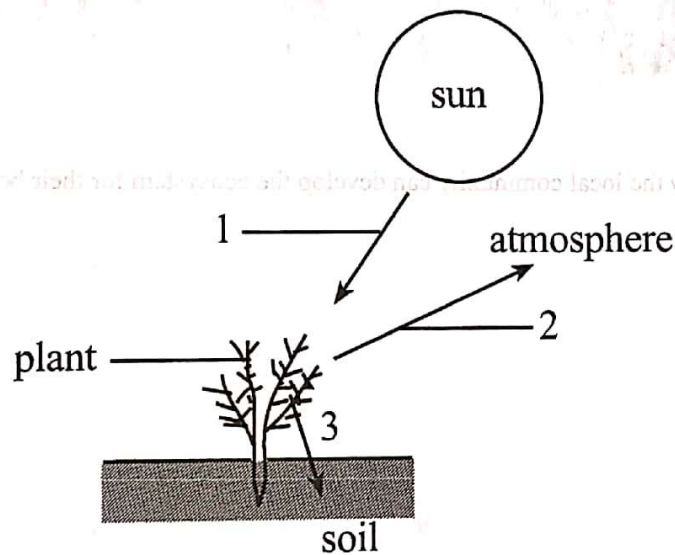


Fig. 4.2

- c) State the processes marked 1, 2 and 3. [3]

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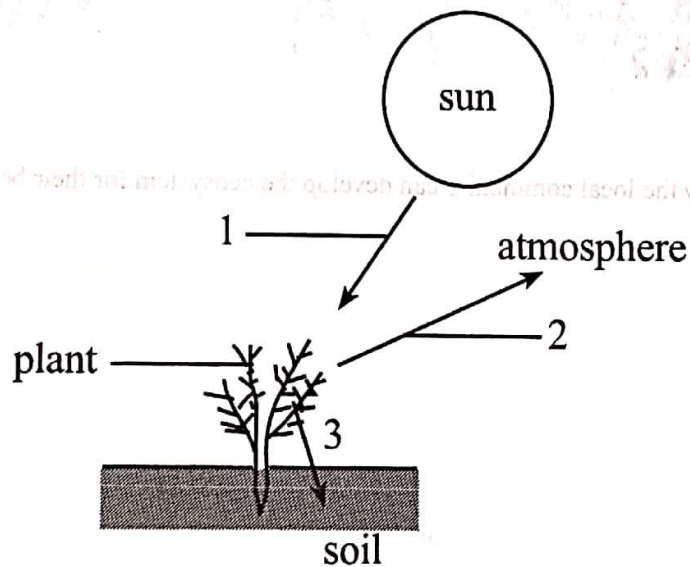


Fig. 4.2

- c) State the processes marked 1, 2 and 3. [3]

Photograph 4.1 shows an ecosystem of an area.



- d) Suggest how the local community can develop the ecosystem for their benefit. [7]

Section B (Economic Geography)

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

- a) i) Explain the term *Environmental Management*. [2]
 ii) Outline the methods used to educate the public on environmental issues. [5]

Fig. 5.1 represents causes and effects of desertification in a communal area of Zimbabwe.

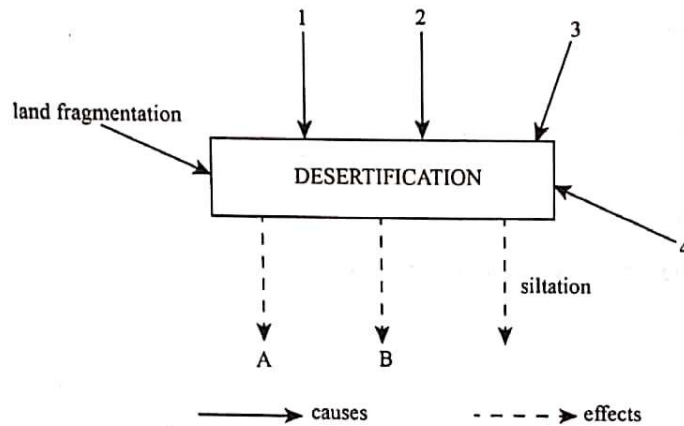


Fig. 5.1

- iii) State the causes marked 1, 2, 3 and 4 and the effects marked A and B. [6]
 iv) Draw a flow chart to show how one of the activities leads to desertification. [5]
- b) i) For a named natural resource in your area, suggest how you would earn a living from its exploitation. [4]
 ii) Identify methods of conserving the resource you named in (c)(i). [3]

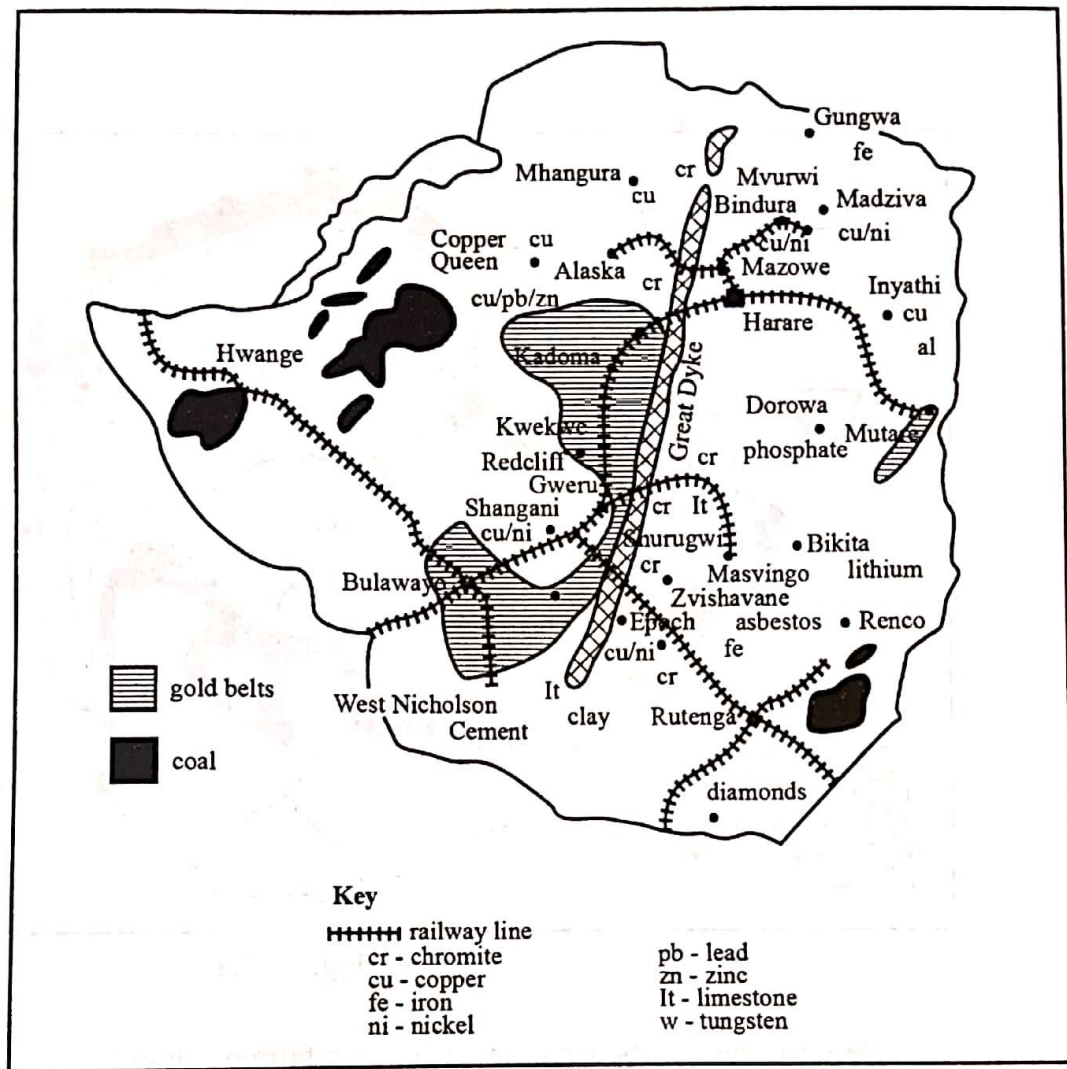
6. a) Table 6.1 below shows minerals.

| Mineral | Uses |
|----------|---------|
| Coal | 1 _____ |
| | 2 _____ |
| Iron ore | 1 _____ |
| | 2 _____ |
| Copper | 1 _____ |
| | 2 _____ |
| Nickel | 1 _____ |
| | 2 _____ |

Copy the table and fill in the blank spaces.

[7]

b) Fig. 6.1 shows the distribution of minerals in Zimbabwe.

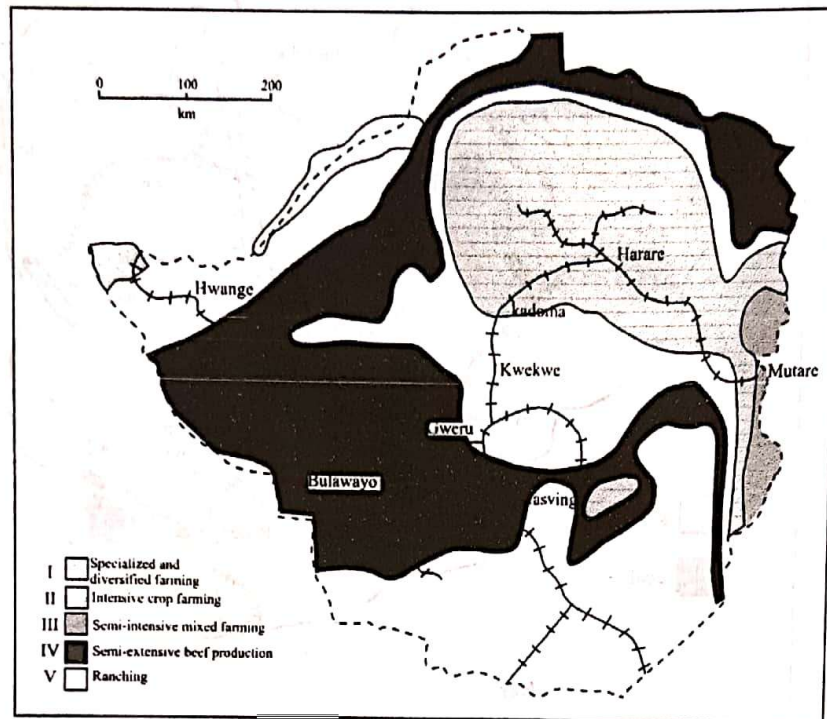


Adapted from Mnkandla V.A. 1997:85

Fig. 6.1

- i) Describe the distribution of the gold belts and coal. [7]
 - ii) Name the minerals associated with the Great Dyke. [3]
 - iii) Using map evidence only state one factor which enables the transportation of minerals. [1]
- c) How would the community benefit from the exploitation of a local mineral resource under community ownership scheme. [7]

7. a) Outline the characteristics of communal farming in Zimbabwe. [7]
- b) Figure 7.1 shows the natural farming regions of Zimbabwe.

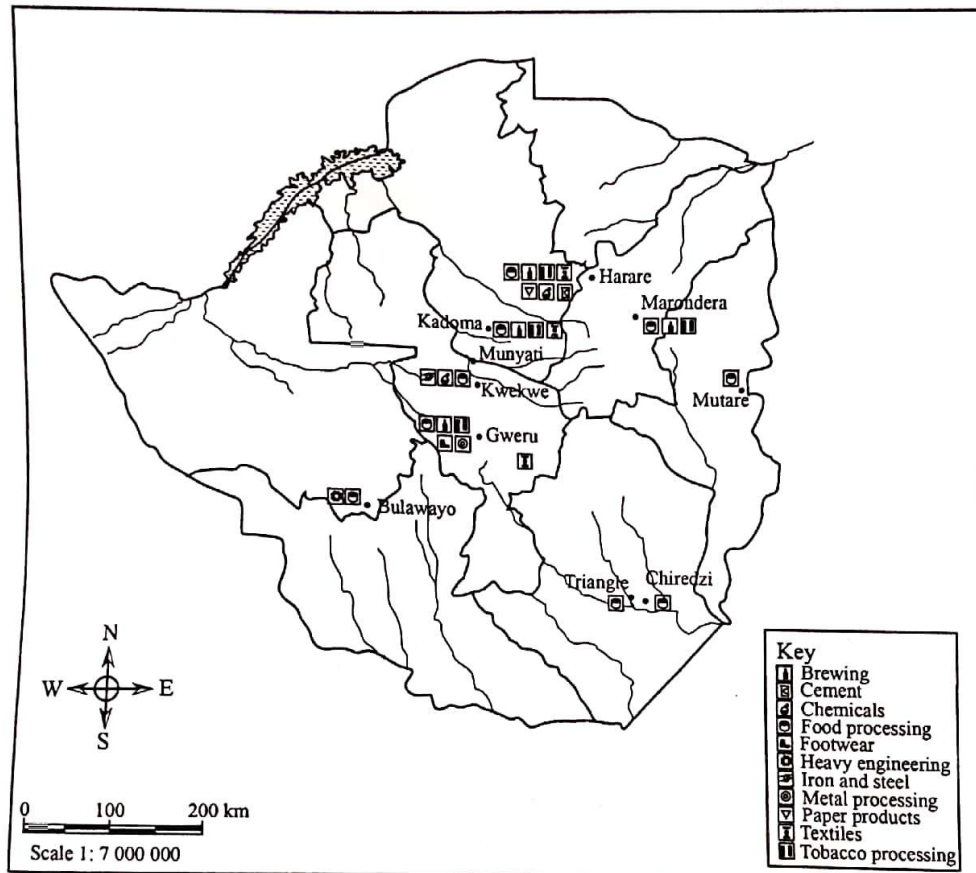


Figures 7.1

- i) Describe the distribution of intensive crop farming shown. [2]
- ii) State two crops grown in each of regions 1, 2 and 5. [6]
- iii) Explain the reasons for the growth of such crops in the regions stated in (b)(ii) above. [3]
- c) How would you construct and manage a paddock? [7]

8. a) Using examples, outline the importance of Small to Medium Enterprises (SMEs) industries in your area. [7]

Fig. 8.1 shows the distribution of industries in Zimbabwe.



Source: Madondo et al 2015

Fig. 8.1

- b) Explain the distribution shown. [7]
- c) Fig. 8.2 shows stages of manufacturing.

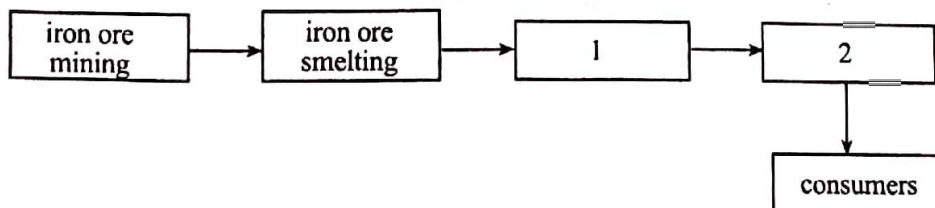


Figure 8.2

- i) Identify stages represented by boxes 1 and 2. [2]
- ii) Describe the advantages of the set up shown in Fig 8.2. [2]
- d) How would you ensure safety and health of workers in a manufacturing industry? [7]

Section C (population, Settlement, Environment, transport and Trade)

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

9. Table 9.1 below shows a list of types of power used in Zimbabwe.

| |
|------------------|
| Solar |
| hydroelectricity |
| thermal power |
| biogas |

- a) i) Classify the types of power in Table 9.1 into renewable and non renewable. [4]
- ii) Describe how biogas is produced. [3]

Table 9.2 below shows the percentage use of energy in a country over a period of time.

| Type of energy | Years and percentage use | | | |
|---------------------|--------------------------|------|------|------|
| | 1980 | 1990 | 2000 | 2010 |
| Hydroelectric power | 46 | 48 | 48 | 49 |
| solar | 3 | 8 | 12 | 23 |
| Biogas | 0 | 0 | 0 | 15 |
| imported | 15 | 15 | 15 | 10 |
| Thermal (coal) | 36 | 29 | 25 | 3 |

- iii) Explain the trends shown. [7]
- iv) Draw a bar graph to represent the use of solar power in Table 9.2. [4]
- b) i) What arguments would you give for the use of solar energy in Zimbabwe? [4]
- ii) Suggest precautions that households should take in the use of gas. [3]

10. a) Outline the causes of veld fires in Zimbabwe. [7]

b) Table 10.1 below shows information about veld fires in Zimbabwe.

| YEAR | FIRE INCIDENCES | HECTARES | NUMBER OF DEATHS |
|------|-----------------|-----------|------------------|
| 2009 | 7 409 | 950 905 | 10 |
| 2010 | 9 361 | 1152 413 | 25 |
| 2011 | 6 780 | 713 770 | 5 |
| 2012 | 1 861 | 1 320 325 | 16 |
| 2013 | 1 981 | 1 179 274 | 4 |
| 2014 | 2 575 | 1 653 822 | 12 |

SOURCE: EMA VELD FIRE MANAGEMENT PAMPHLET.

i) Describe the trends shown. [5]

ii) Draw a bar graph to represent the deaths of people over the period shown. [6]

c) Outline the education guidelines you would give to your local community on the construction of fireguards. [7]

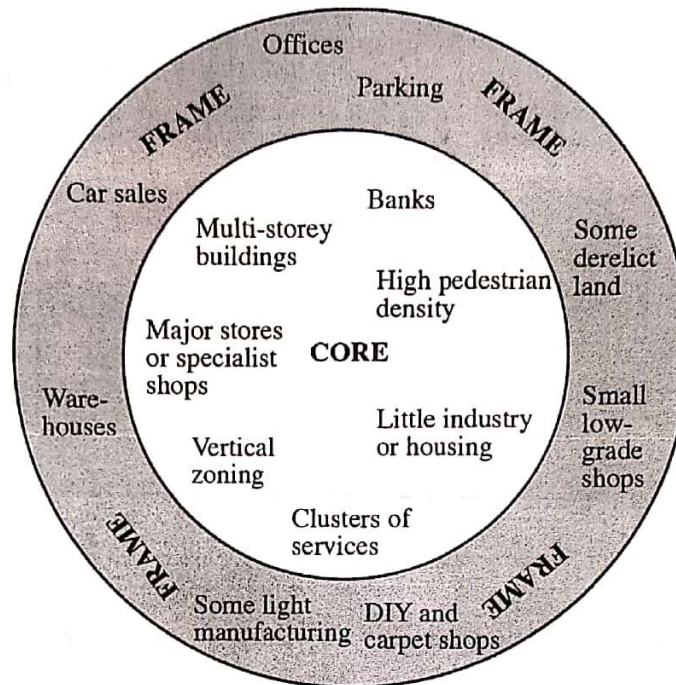
11. a) i) Explain the terms *population distribution* and *population density*. [4]

ii) State **one** example of each of the following factors which affect population distribution and density in a country.
physical,
economic and
human [3]

- b) i) Draw the structure of any one of the urban landuse models.

[5]

Fig 11.1 shows functions found in the CBD of a city.



Source: Kelly and Ferretwell 2012: 65

Fig 11.1

- c) Explain the distribution of the functions shown.
- d) Suggest measures you would use to control malaria.

[6]

[7]

12. a) Describe the aims of any economic grouping of your choice in Africa. [7]

b) Fig. 12.1 shows costs of transport for different modes of transport.

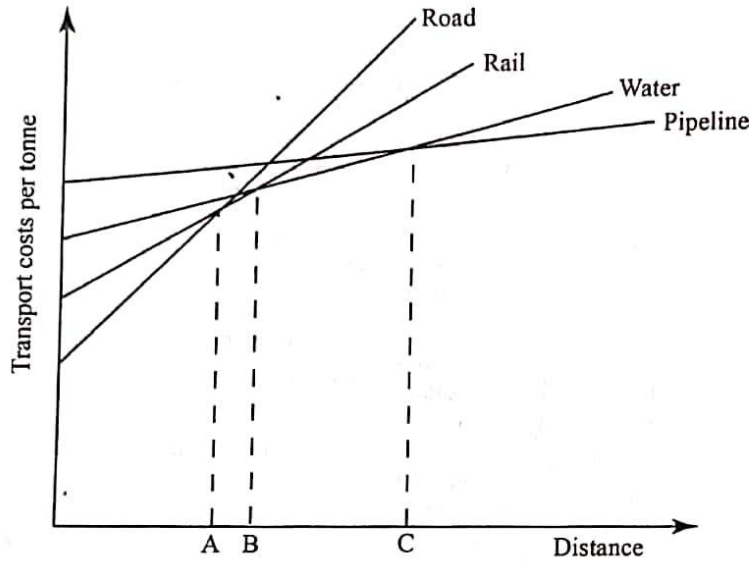


Fig. 12.1

- i) Explain the comparative costs of transport shown. [6]
 - ii) Explain how developments in technology have improved rail transport. [5]
- c) Suggest how import substitution may benefit small to medium scale industries in Zimbabwe. [7]