



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE
NAME

--

CENTRE
NUMBER

--	--	--	--	--

CANDIDATE
NUMBER

--	--	--	--

GEOGRAPHY

6890/02

Paper 2 Geographical Skills

October/November 2022

2 hours

Additional Materials: Ruler
Protractor
Plain paper
Calculator
1:50 000 survey map extract enclosed with this Question Paper

READ THESE INSTRUCTIONS FIRST

Write your name, Centre number and candidate number in the spaces provided.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs, calculations, tables or rough working.

SECTION A

Answer **all** questions.

SECTION B

Answer **all** questions.

SECTION C

Answer **one** question.

The Insert contains Photograph A for Question 4 (a), Fig. 7 for Question 5 (c), and Fig. 12 for Question 6 (b).

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

For Examiner's Use	
Section A	
Question 1	
Section B	
Question 2	
Question 3	
Question 4	
Section C	
Either Question 5	
Or Question 6	
Total	

This document consists of **21** printed pages and **3** blank pages.

SECTION A

Answer **all** questions in this section.

1 The map extract is for Zvishavane (Zimbabwe). The scale is 1: 50 000.

Fig. 1 shows the position of some features in the map extract.

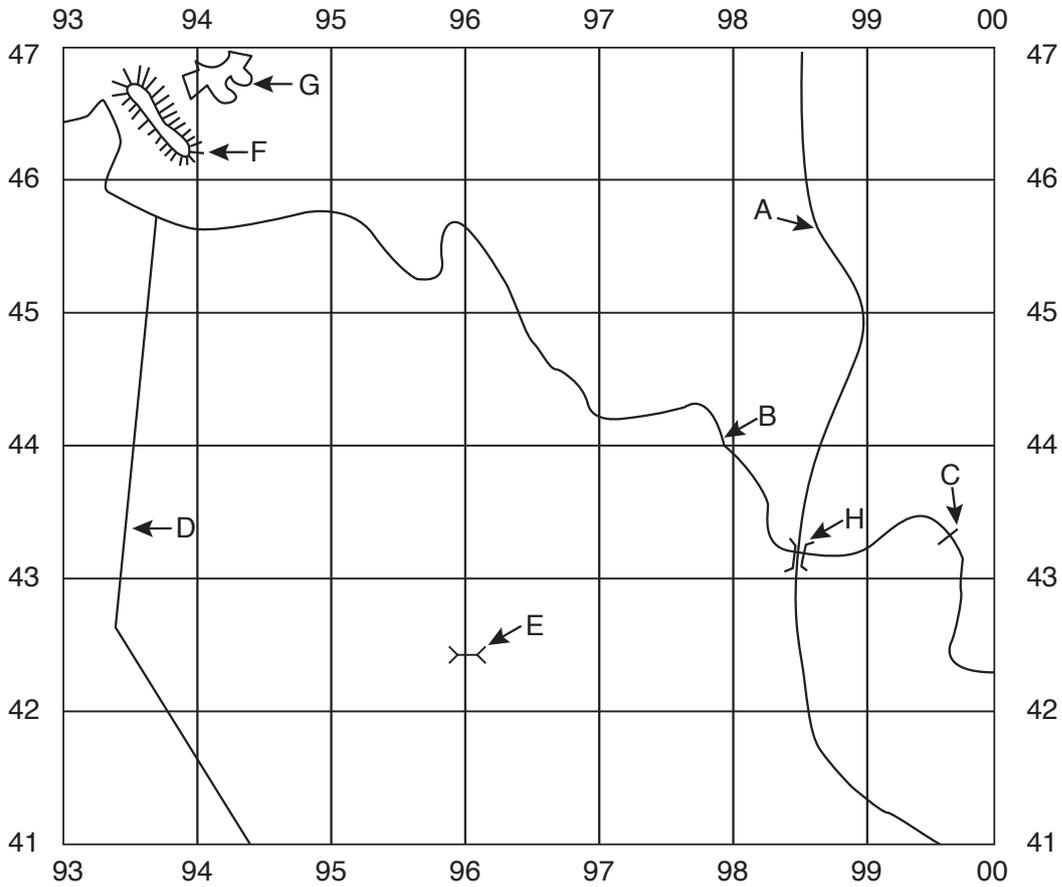


Fig. 1

(a) Identify the following features shown in Fig. 1:

(i) type of road **A**;

..... [1]

(ii) name of river marked **B**;

..... [1]

(iii) feature **C**;

..... [1]

(iv) feature **D**;

..... [1]

(v) feature E;
..... [1]

(vi) feature F;
..... [1]

(vii) land use at G;
..... [1]

(viii) feature H.
..... [1]

(b) (i) State the height of the summit of Manjere mountain in grid square 9939.
..... [1]

(ii) What is the six figure grid reference of the Poromora hill summit on the east of the town of Zvishavane?
..... [1]

(iii) Measure the whole circle bearing of the Ruins in grid square 0045 from Poromora hill summit.
..... [1]

(c) (i) What is the general direction of flow of the river Shavi?
..... [1]

(ii) Study the course of the river Shavi east of easting 00. Name any **two** physical features found along it.
1
2 [2]

(d) (i) Measure the length of the stretch of the railway line in metres, on the south western part of the map extract.

..... [1]

(ii) The height where the railway line ends next to Northing 42 is 1150 metres and where it ends next to easting 94 it is 1000 metres. Calculate the gradient between the two points of the railway line.

.....
.....
.....
..... [2]

(iii) State **three** social facilities found in the town of Zvishavane.

1
2
3 [3]

(e) Identify **three** pieces of map evidence which show that mining takes place in the town of Zvishavane.

1
2
3 [3]

(f) (i) Name the settlement pattern found in grid squares 9747 and 9748.

..... [1]

(ii) State **one** reason why the area in the south western part of the map extract is without settlements.

..... [1]

[Total: 25 marks]

SECTION B

Answer **all** questions in this section.

2 (a) Study Fig. 2, which shows types of clouds.

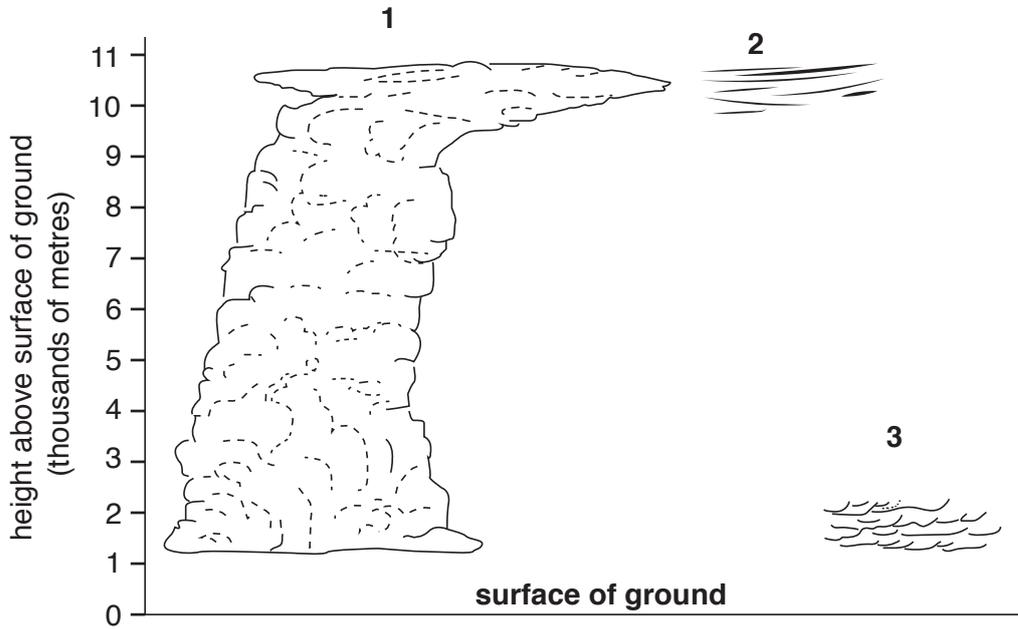


Fig. 2

(i) Name the clouds labelled **2** and **3** in Fig. 2.

Cloud **2**

Cloud **3** [2]

(ii) Describe **two** characteristic features of the cloud labelled **1** in Fig. 2.

1

2 [2]

(b) Study Fig. 3, which shows a process occurring in the Earth's crust.

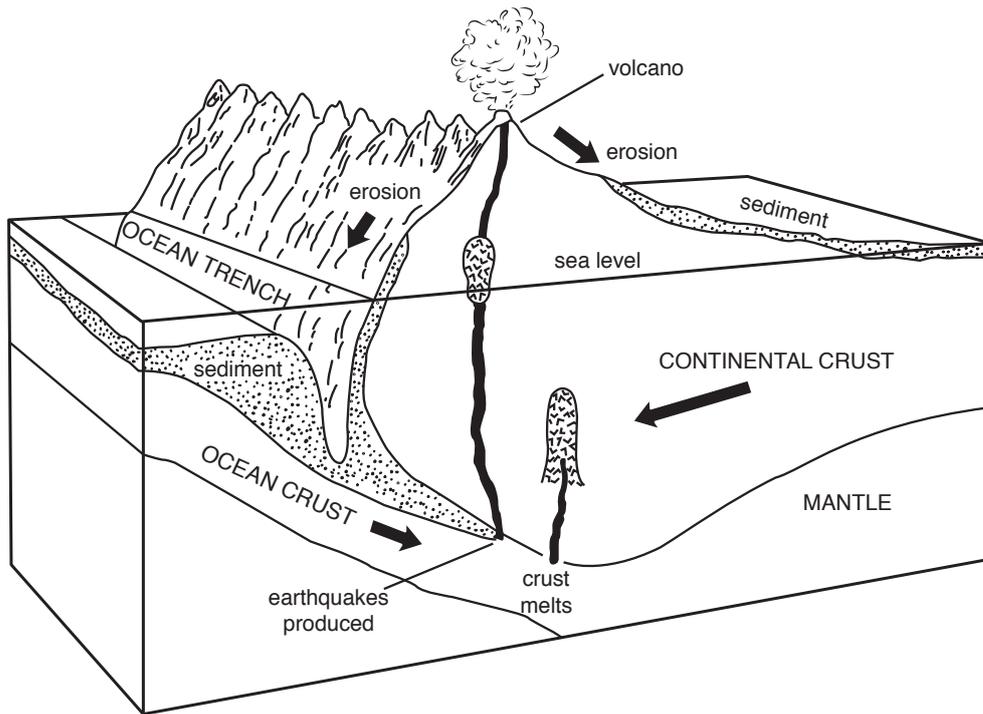


Fig. 3

(i) What type of plate boundary is shown in Fig. 3?

..... [1]

(ii) Explain why volcanoes occur in the area shown in Fig. 3.

.....

 [3]

[Total: 8 marks]

3 (a) Study Fig. 4, which shows the employment structure in LEDCs and MEDCs.

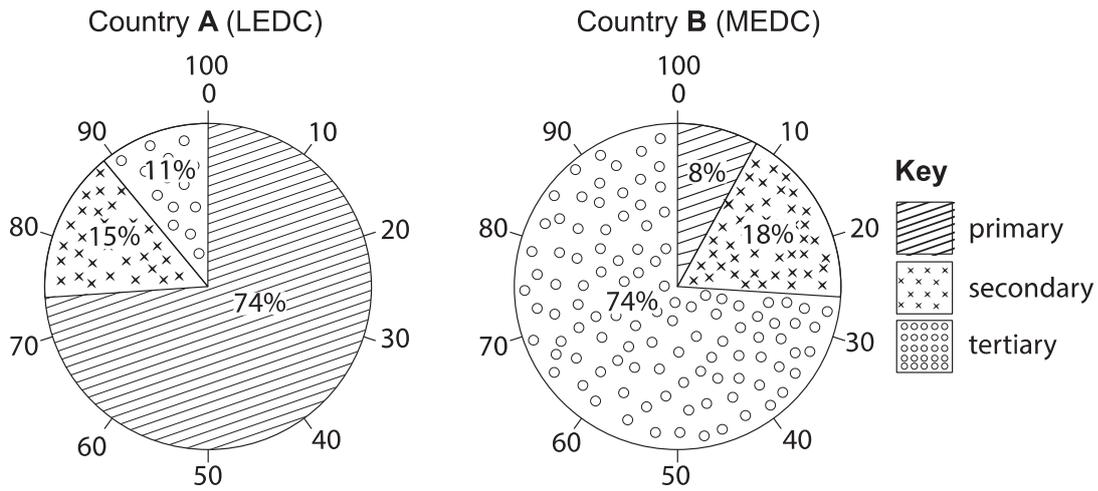


Fig. 4

Describe **three** differences in the employment structure between LEDCs and MEDCs.

.....

.....

.....

.....

.....

.....

..... [3]

- (b) (i) Plot a dot of the employment structure for Eswatini in the appropriate position in the triangular graph shown in Fig. 5. [1]

Primary 70%, Secondary 20% and Tertiary 10%

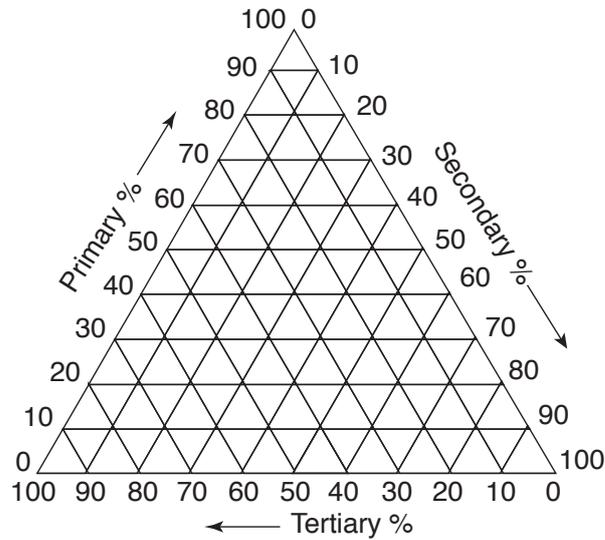


Fig. 5

- (ii) Suggest **two** reasons for the employment structure of Eswatini.

1

.....

2

..... [2]

- (iii) State how the employment structure of the country will change as it develops.

.....

.....

.....

..... [2]

[Total: 8 marks]

4 (a) Study Photograph A (Insert), which shows a residential zone of a town.

(i) In which residential zone was the photograph taken?

..... [1]

(ii) Describe **three** features of the housing shown in Photograph A.

1

2

3 [3]

(iii) Suggest **two** advantages of living in this residential zone.

1

2 [2]

(b) Study Fig. 6, which shows the population pyramid of Kenya, an LEDC in Africa.

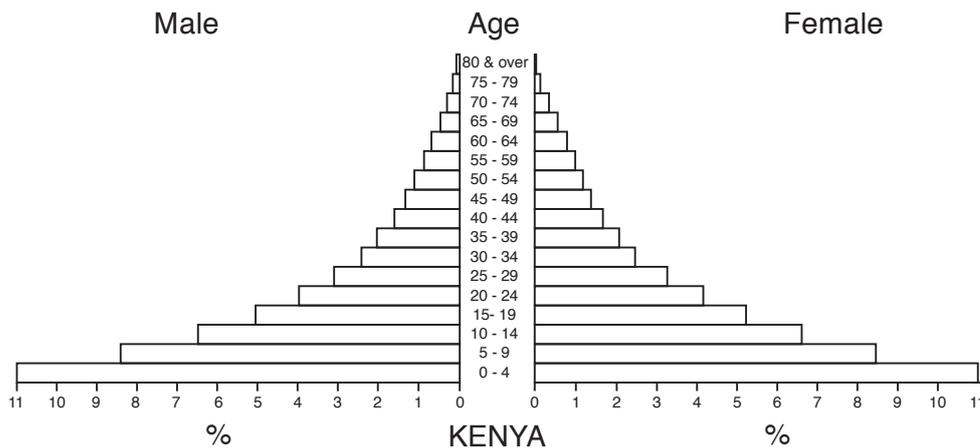


Fig. 6

(i) What percentage of the population are males aged 15 to 19 years?

..... [1]

(ii) Describe **two** features of the population structure of Kenya shown in Fig. 6.

1

.....

2

..... [2]

[Total: 9 marks]

SECTION C

Answer **either** Question 5 **or** Question 6.

5 A group of students studied the characteristics of a low density housing zone and an informal settlement zone in the city of Mbabane. They decided to investigate the following hypotheses;

Hypothesis 1: *Facilities in the houses in a low density housing zone are better than those in an informal settlement zone.*

Hypothesis 2: *Houses in a low density housing zone are less crowded with people than those in an informal settlement zone.*

(a) Before carrying out the investigation the students decided to visit the two residential zones.

(i) What is an informal settlement?

.....
..... [1]

(ii) Name any **two** things the students would need when planning to carry out this investigation.

1
2 [2]

(b) The students decided to investigate **Hypothesis 1:** *Facilities in the houses in a low density housing zone are better than those in an informal settlement zone*, by interviewing 50 people in each residential zone.

(i) What is a residential zone?

.....
..... [1]

(ii) Name **two** other zones found in a town.

.....
..... [2]

(c) Study Fig. 7 (Insert), which shows the questionnaire used by the students when collecting data.

(i) Give **two** reasons why Question 1 in the questionnaire should not be asked.

1

.....

2

..... [2]

(ii) Describe **two** good features of the questionnaire shown in Fig. 7.

1

.....

2

..... [2]

(d) The results of the questionnaire are shown in Table 1.

Table 1

Question	Low density housing zone (%)	Informal settlement zone (%)
2. Where do you get your water supply?		
• Standpipe	16	36
• Tap inside the house	70	4
• Other	14	60
3. What are your toilet facilities?		
• Pit latrine	10	100
• Flushed toilet	90	0
4. How do you get your electricity supply?		
• No electricity supply	4	30
• Town board	90	15
• Illegal connection	6	55

- (i) Use the results for Question 2 in Table 1 to complete the block bar graph, Fig. 8, for low density housing zone. [2]

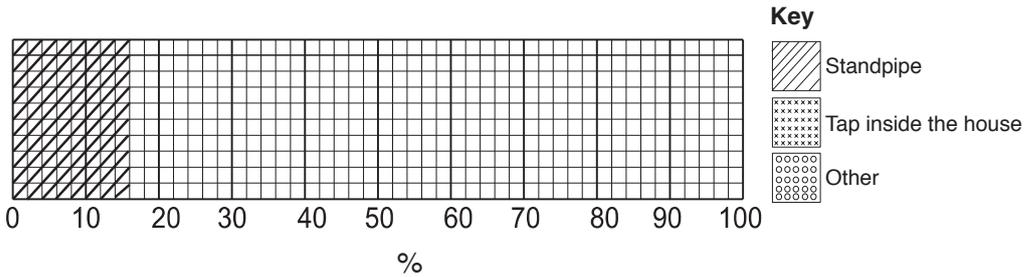


Fig. 8

- (ii) The students decided to plot the results for Question 4 for the informal settlement zone on a pie graph, Fig. 9. Use the information from Table 1 to complete the pie graph. [3]

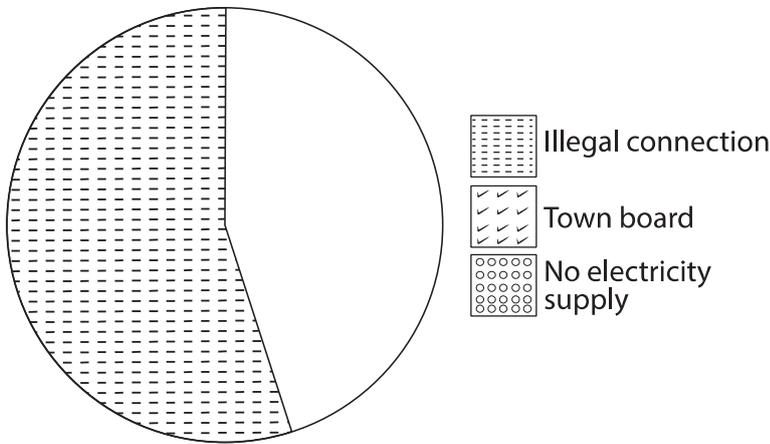


Fig. 9

- (iii) Write a conclusion to the investigation for **Hypothesis 1: Facilities in the houses in a low density housing zone are better than those in an informal settlement zone.** Use evidence from Table 1, Fig. 8 and Fig. 9 to support your answer.

.....

.....

.....

.....

.....

.....

..... [3]

- (e) The students further tested **Hypothesis 2**: *Houses in a low density housing zone are less crowded with people than those in an informal settlement zone.* A questionnaire was used. They asked two questions;

Question 1: How many rooms are there in your family house?

Question 2: How many people live in your family house?

The results of the questionnaire are shown in Table 2.

Table 2

1. How many rooms are there in your family house?

Number of rooms	Low density housing zone (%)	Informal settlement zone (%)
• 1 room	38	70
• 2 rooms	22	26
• 3 rooms	25	4
• 4 rooms	15	0

- (i) Use the results in Table 2 for Question 1 to complete the bar graph, Fig. 10, for the low density housing zone. [2]

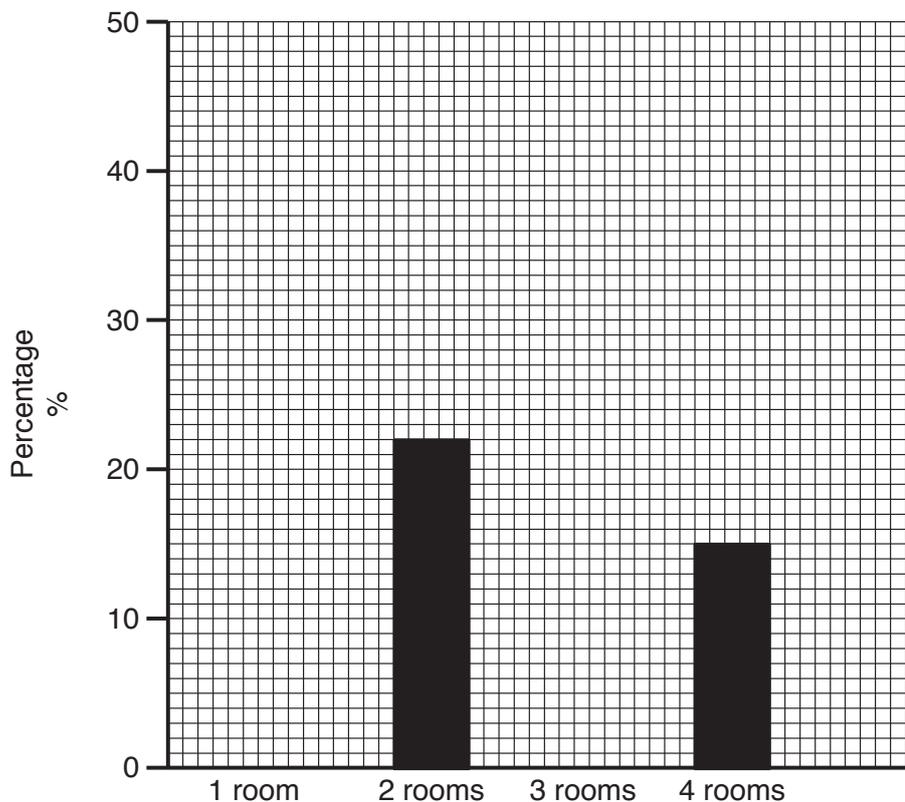


Fig. 10

(ii) The students then plotted the results for Question 2, on a bar graph, Fig. 11.

Using Fig. 11, complete Table 3 by stating the number of people living in 2 room houses in the informal settlement zone. [1]

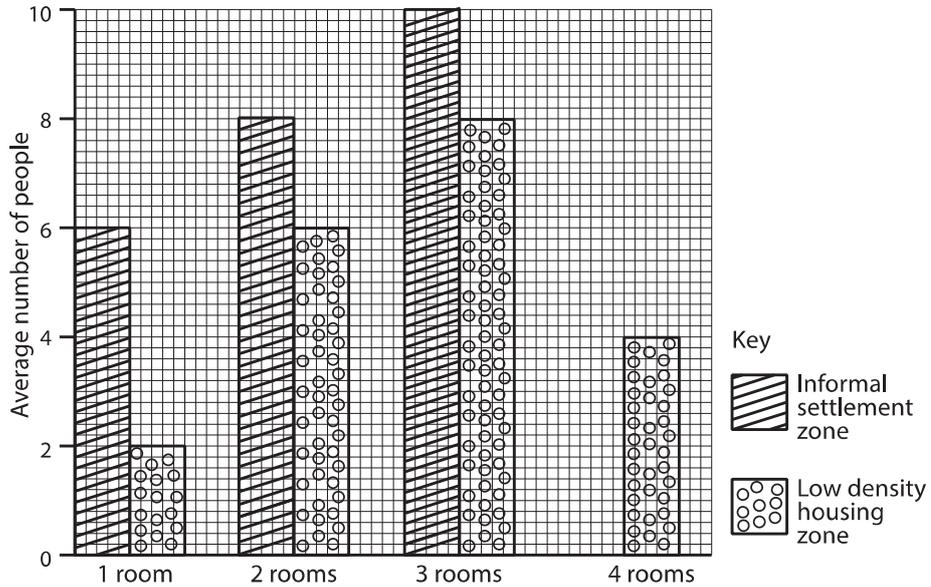


Fig. 11

Table 3

2. How many people live in your family house?

Number of rooms	Average number of people per house	
	Informal settlement zone	Low density housing zone
houses with 1 room	6	2
houses with 2 rooms	6
houses with 3 rooms	10	8
houses with 4 rooms	0	4

(iii) Write a conclusion to the investigation for **Hypothesis 2**: *Houses in low density housing zone are less crowded with people than those in an informal settlement zone*. Use evidence from Table 3 and Fig. 11 to support your answer.

.....
.....
.....
.....
.....
..... [3]

(iv) Suggest **one** way in which the students could improve the investigation to make the results more reliable.

.....
..... [1]

[Total: 25 marks]

6 Students from a school in Eswatini wanted to investigate the impact of alien invasive species (an introduced plant that negatively changes its new environment) on the distribution of indigenous vegetation (plant species occurring naturally in an area). They decided to investigate two hypotheses;

Hypothesis 1: *The area covered by alien invasive species has increased from 1990 to 2020 while the area covered by indigenous vegetation has decreased.*

Hypothesis 2: *The variety of alien invasive species has increased from 1990 to 2020.*

(a) To investigate **Hypothesis 1:** *The area covered by alien invasive species has increased from 1990 to 2020 while the area covered by indigenous vegetation has decreased,* the students decided to use both primary and secondary data. They measured the areas covered by both alien invasive species and indigenous vegetation.

(i) Define secondary data.

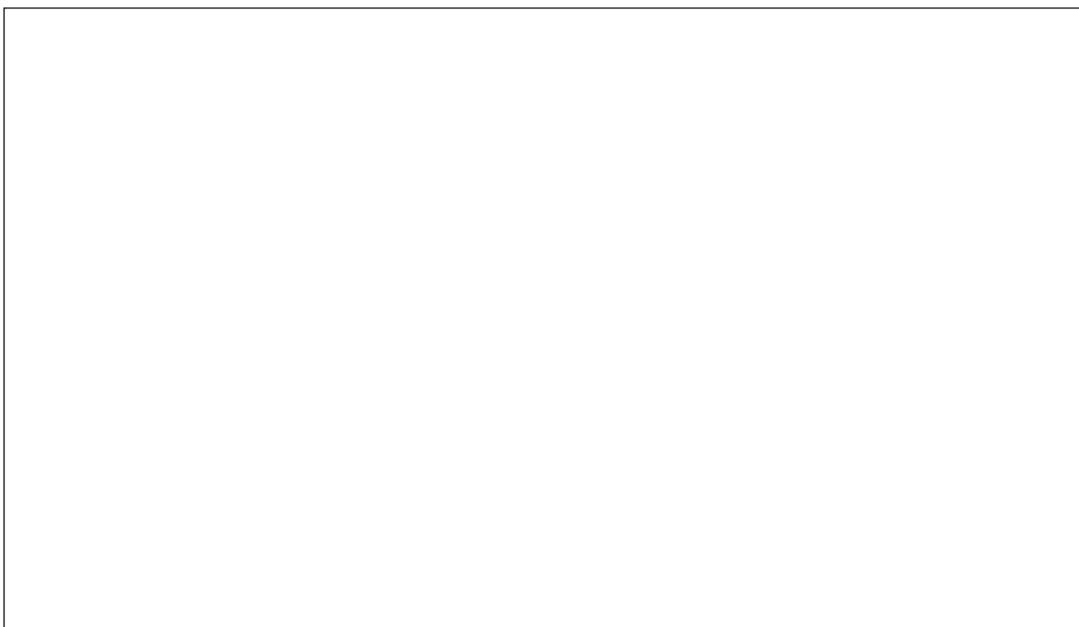
.....
..... [1]

(ii) Give **two** advantages of using primary data.

.....
.....
.....
..... [2]

(b) The students used their results to draw a map, Fig. 12 (Insert) to show the area covered by the alien invasive species and indigenous vegetation.

(i) Use Fig. 12 (Insert), to calculate the area in square metres covered by alien invasive species. Show your working. [4]



- (ii) The students also calculated the area covered by indigenous vegetation.

The area was found to be 3400 m². They plotted both the area covered by indigenous vegetation and alien invasive species on a bar graph, Fig.13.

Complete the bar graph by plotting the area covered by alien invasive species. [2]

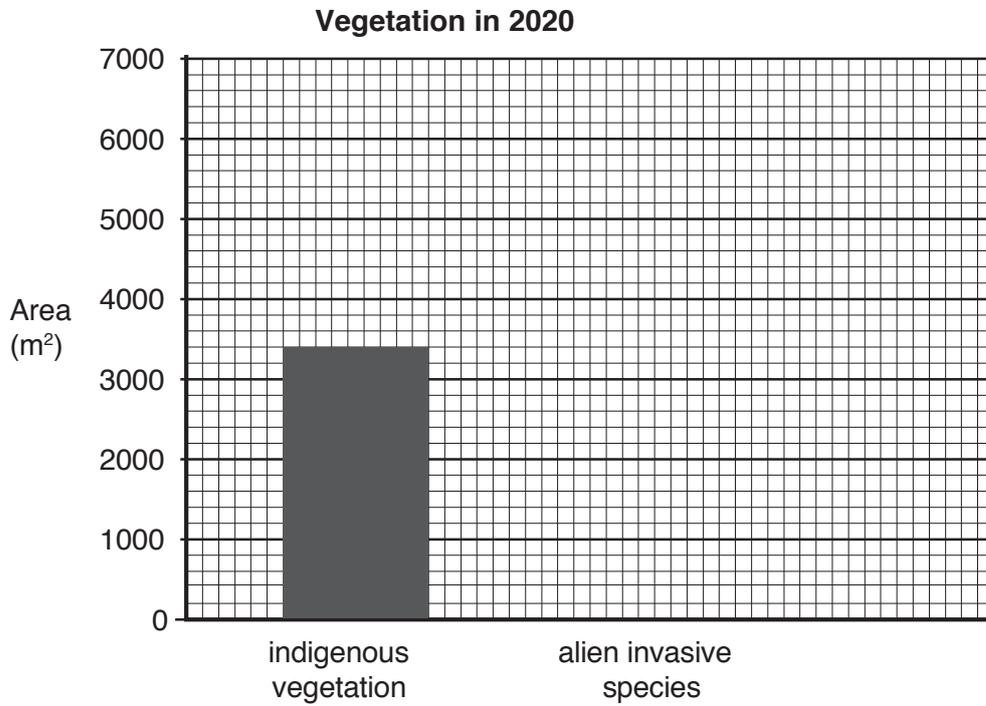


Fig. 13

(c) The students relied on secondary data to find out the area covered by both indigenous vegetation and alien invasive species in the year 1990.

(i) Suggest **two** sources where they might have obtained this secondary data.

1

2 [2]

(ii) Fig. 14 is a bar graph which shows the same area covered by indigenous vegetation and alien invasive species in 1990. Use Fig. 14 to state the area covered by alien invasive species in 1990.

..... [1]

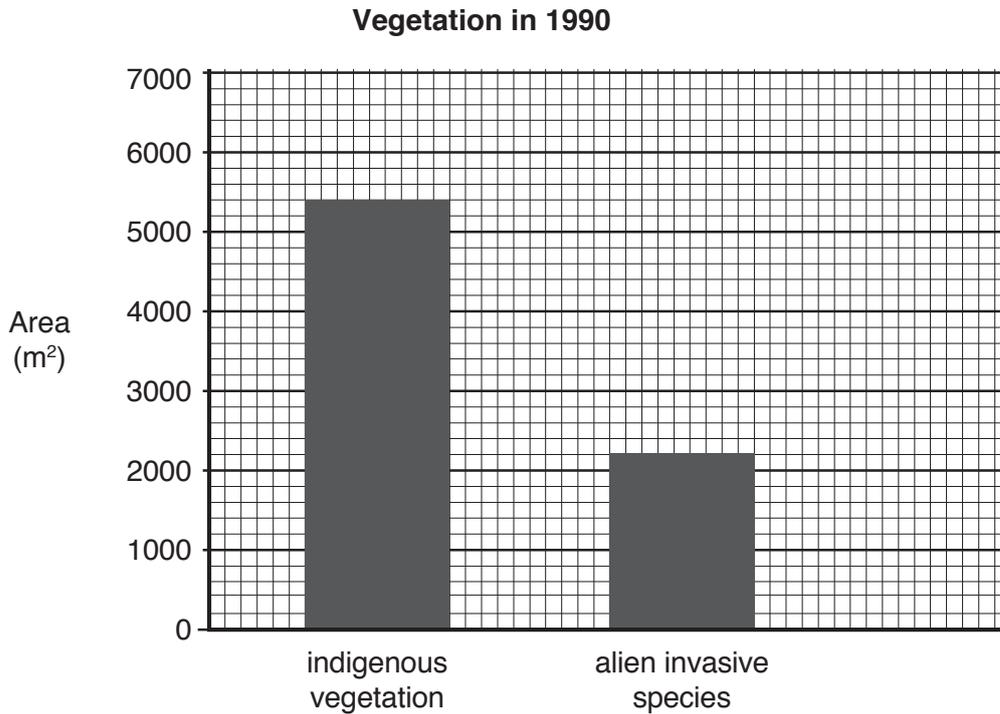


Fig. 14

(d) Write a conclusion to the investigation for **Hypothesis 1**: *The area covered by alien invasive species has increased from 1990 to 2020 while the area covered by indigenous vegetation has decreased.* Use evidence from Fig. 12 (Insert), Fig. 13 and Fig. 14 to support your answer.

.....

.....

.....

.....

.....

..... [3]

(e) To investigate **Hypothesis 2: The variety of alien invasive species has increased from 1990 to 2020**, the students decided to use a transect to observe the same area shown in Fig. 12. They agreed to make their observations along the banks of the river.

(i) What is a transect?

.....
..... [1]

(ii) Fig. 15, shows the results of the secondary data collected in 1990, and Fig. 16 shows the results of the students' measurements in the same area in 2020.

Use the information in Fig. 15 and Fig. 16 to complete Table 4.

[2]

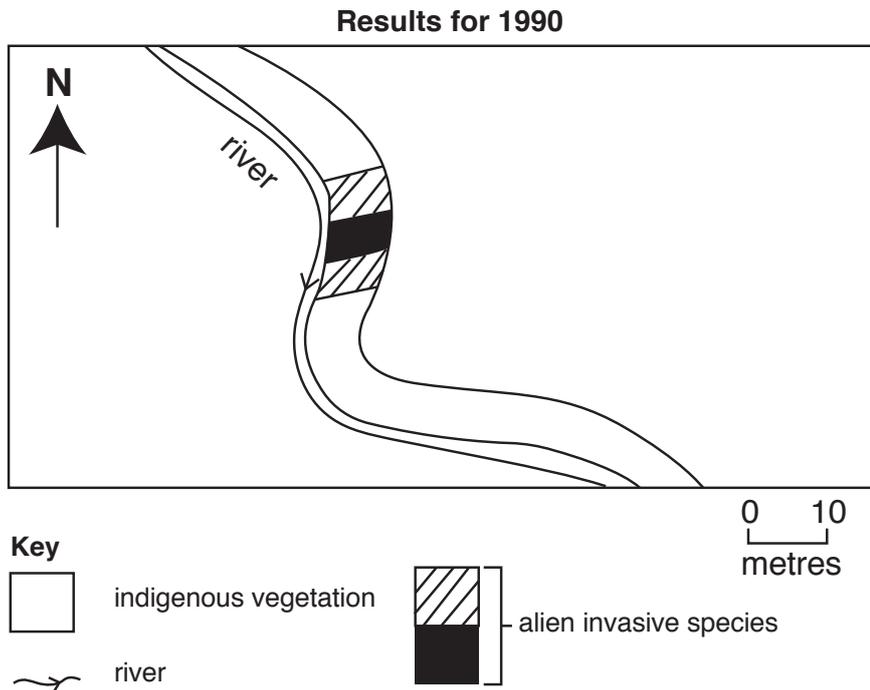


Fig. 15

(iv) Suggest **four** ways by which the students would improve the investigation to make the results more reliable.

.....

.....

.....

.....

.....

..... [4]

[Total: 25 marks]

