This document consists of 13 printed pages, 1 blank page and 1 Insert.
1 Study the 1:50 000 map extract of the Rusape area in Zimbabwe.

(a) Identify the types of road found in grid square 9852.

(b) Fig. 1 shows a cross section along the line X to Y, which is marked on the map extract.

(i) On Fig. 1, complete the cross section by plotting the remaining contours. [3]

(ii) Mark with an arrow, and label with the letter shown in brackets, the following features onto your completed cross section:

- Pfunwa Hill (P); [1]
- the 33 kV Power Line (PL); [1]
- a stream (S); [1]
- the main area of cultivated land (C), and also show how far it extends. [2]

(iii) Suggest a reason for the location of the cultivated land you have marked on the cross section. [1]

(c) In which direction is Tandi School (in grid square 9749) from Pfunwa Hill? [1]
(d) Describe the location of the huts in the western part of the map extract.

(2)

(e) The Rusape River flows across the area.

(i) Give two pieces of evidence which suggest that the river is flowing from the north east towards the south west.

1

2

(2)

(ii) Measure the average width of the river in grid square 0242. Tick (✓) one correct answer.

<table>
<thead>
<tr>
<th>Width (m)</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

(1)

(iii) Which one of the following statements about the Rusape river is correct? Tick (✓) one correct answer.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>the river has a wide flood plain</td>
<td></td>
</tr>
<tr>
<td>the river has no tributaries</td>
<td></td>
</tr>
<tr>
<td>the river has a delta shown on the map</td>
<td></td>
</tr>
<tr>
<td>the river has straight sections and meandering sections</td>
<td></td>
</tr>
</tbody>
</table>

(1)
(f) Fig. 2 shows the road in the north west of the map extract.

(i) On Fig. 2, the heights of two of the contours are shown. Label the heights of the other four contours. [1]

(ii) Measure the distance in metres along the road between points E and F.  

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

[Total: 20 marks]
2 (a) Study Fig. 3, which shows the changing fertility rate in China. Fertility rate is the average number of children a woman bears in her lifetime.

Fig. 3

What was the fertility rate in:

1960; ...............................................................

1980; ...............................................................


(b) On Fig. 3, complete the line to show China’s predicted population growth. Use the figures in the table below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>1400</td>
</tr>
<tr>
<td>2050</td>
<td>1300</td>
</tr>
</tbody>
</table>

[2]
(c) Many people think that it is China’s ‘One child policy’ that has caused the reduction in fertility rate. Does Fig. 3 support this idea?

[2]

(d) Name two social or economic factors (other than population data), which might help to explain the changes in China’s population.

1

[2]

2

[Total: 8 marks]
3  (a) Fig. 4 shows the highest and lowest annual rainfall totals in a recent ten year period for a place in the Murray-Darling River Basin in Australia.

![Rainfall Graph](image)

**Fig. 4**

(i) The mean rainfall over a period of thirty years is 570 mm. Show this on Fig. 4, using an arrow. [1]

(ii) How can water authority services in such areas ensure that water is available in dry years? [2]
(b) Study Fig. 5 and Table 1, which show the different uses of water in two states in Australia.

Table 1

<table>
<thead>
<tr>
<th>water use in South Australia</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>agriculture</td>
<td>77</td>
</tr>
<tr>
<td>domestic</td>
<td>10</td>
</tr>
<tr>
<td>industry</td>
<td>5</td>
</tr>
<tr>
<td>other</td>
<td>8</td>
</tr>
</tbody>
</table>

(i) On Fig. 5, complete the pie graph for the state of South Australia using the information for domestic and industry in Table 1. Use the key provided for shading. [3]

(ii) Which user consumes the largest amount of water in Northern Territory and what proportion of the supplies does it use? [1]

(iii) Using the information given only, compare water use for agriculture in the two states. [1]

[Total: 8 marks]
Study Photograph A (Insert), which shows a valley in southern Japan.

Describe the relief, settlement and land-use of the area shown in the photograph.

Relief

Settlement

Land-use

[Total: 8 marks]
Study Fig. 6, which shows Havana, the capital city of Cuba. Cuba is an island in the Caribbean.

Fig. 6

(a) Describe the location of the tourist areas shown on Fig. 6.

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

(b) (i) Which tourist area had the most hotel rooms in 2002?

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

(ii) Which area showed the biggest increase in number of hotel rooms between 1988 and 2002?

........................................................................................................................................................................ [1]
(c) Describe how the number of hotel rooms changed between 1988 and 2002 in the three areas shown on Fig. 6.

[3 marks]

(d) Suggest one reason for the different growth rates of the tourist areas.

[1 mark]

[Total: 8 marks]
Fig. 7 shows energy sources for four countries.
(a) Using the examples on Fig. 7, identify **one** fossil fuel and **one** renewable energy source.

Fossil fuel .............................................................................................................................................

Renewable energy source ....................................................................................................................... [2]

(b) Fig. 7 shows that the governments of the four countries use very different percentages of sources of power. Suggest why governments have made these different choices.

.............................................................................................................................................................

.............................................................................................................................................................

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

(c) Explain **two** changes in these percentages that might be suggested by an environmental pressure group.

1 .............................................................................................................................................................

.............................................................................................................................................................

.............................................................................................................................................................

2 .............................................................................................................................................................

.............................................................................................................................................................

............................................................................................................................................................. [4]

[Total: 8 marks]