ZIMBABWE SCHOOL EXAMINATIONS COUNCIL
General Certificate of Education Advanced Level

GEOGRAPHY 6037/3
PAPER 3 Practical Test

JUNE 2019 SESSION 3 hours

1: 50 000 survey map Zimbabwe district map and satellite images are enclosed with this question paper

Additional materials:
Answer paper

TIME 3 hours

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **all** questions in Section A, one question in Section B and one question in Section C.

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 9 printed pages 3 blank pages and an insert.

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SECTION A: STATISTICS

Answer **all** questions in this section.

1 **(a)** **(i)** Define cyclic data. [1]

(ii) State **one** example of cyclic data. [1]

(b) State the measure of central tendency which is best for

(i) a shoe manufacturer, [1]

(ii) continuous and symmetrical data, [1]

(iii) skewed data. [1]

(c) **Table 1.1** shows the number of sunshine hours, x and the midday temperature, y in °C in Gweru during the first seven days in April.

Table 1.1

Day	Hours of sunshine x	Midday temperature, y °C
1	10	18
2	11	20
3	3	13
4	6	14
5	7	19
6	8	15
7	12	14

(i) Plot the data on a scatter diagram. [3]

(ii) Calculate the equation of the regression line of y and x. [7]

(iii) Draw the regression line that you calculated in **(b) (i)** above, on your scatter diagram. [2]

(iv) Use your graph to estimate the number of hours of sunshine expected on a day when the midday temperature is 17 °C. [1]

(d) The time taken to install a DSTV decoder is found to be normally distributed with a mean time equal to 45 minutes ($M_x = 45$) and a Standard Deviation of 8 minutes ($\delta_x = 8$).

For a new installation, what is the probability that it will take

(i) between 45 and 51 minutes,

(ii) less than 40 minutes. [7]

SECTION C: RESEARCH TECHNIQUES

Answer **one** question from this section.

5 HUMAN COMPONENTS

You are required to carry out a survey on beef cattle production in Mwenezi.

(a) Prepare an interview guide to collect information on their marketing strategies. [8]

(b) Describe problems faced in carrying out the survey. [4]

(c) **Table 5.1** below shows hypothetical beef cattle distribution in Masvingo Province.

Table 5.1

Name of District	Beef cattle (000s)
Gutu	90 000
Masvingo	140 000
Mwenezi	250 000
Zaka	95 000
Bikita	120 000
Chiredzi	220 000
Chivi	80 000

(i) Using information from **Table 5.1** construct a dot map of beef cattle distribution in Masvingo province using the base map provided in the insert. [9]

(ii) Comment on the beef cattle distribution in Masvingo Province. [4]

PHYSICAL COMPONENTS

6 (a) **Figure 6.1** below shows a drainage basin of an area in Gokwe.

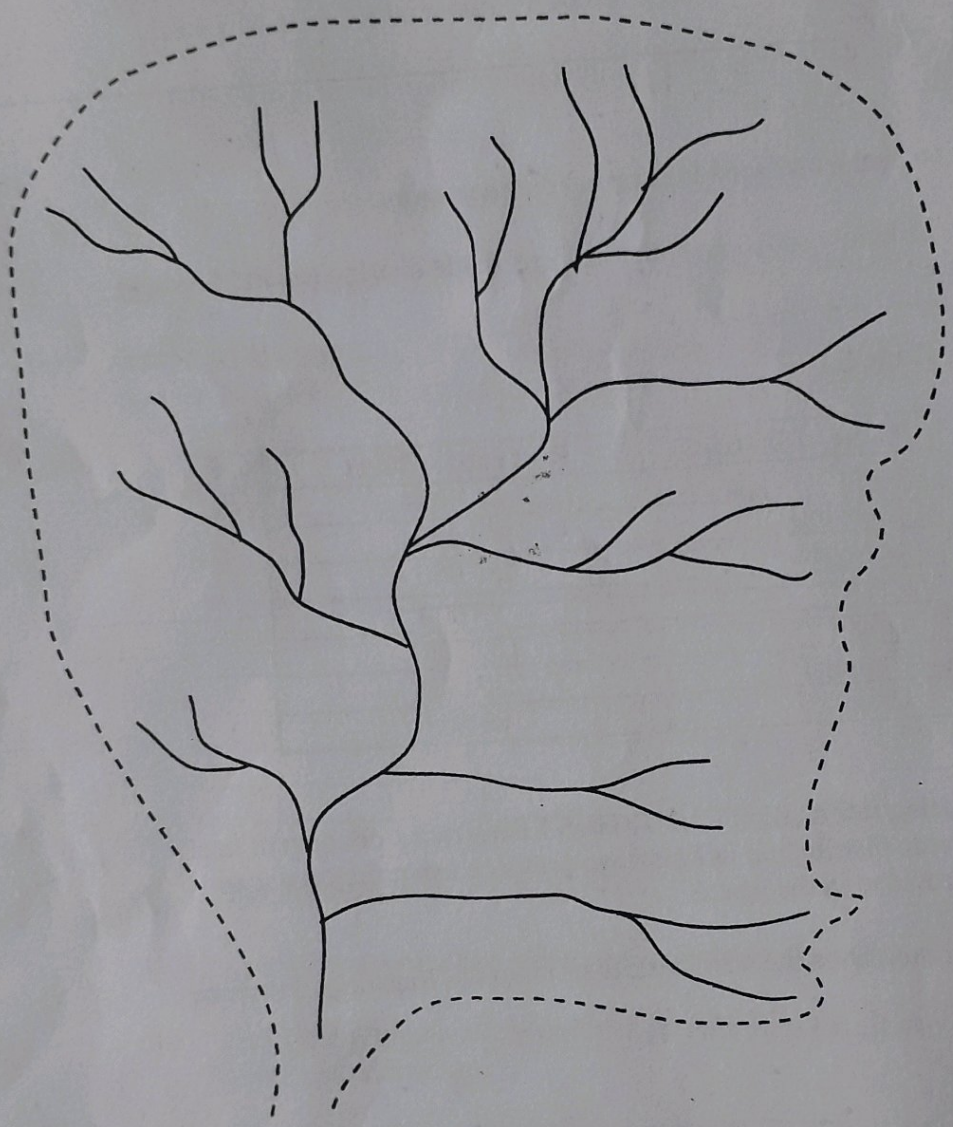

Fig 6.1

(i) Using the bifurcation ratio calculate the stream density of the drainage basin. [5]

(ii) Comment on the drainage density of the area. [2]

(iii) Explain why quantitative analysis of drainage basins is an important aspect in the study of drainage basins. [2]

[Turn over

(a) **Table 6.1** below shows discharge of Kaungwe drainage basin taken over a period of time.

Table 6.1

Discharge (CUMECS)	5	12	20	33	45	51	53	51	45	33	23	10	0
Time(Hrs)	6	14	18	22	25	29	34	40	44	50	54	60	70

(i) Draw a well labelled storm hydrograph showing discharge of Kaungwe drainage basin. [10]

(ii) Comment on the shape of the hydrograph. [3]

(iii) Explain the importance of studying hydrographs of drainage basins. [3]

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GEOGRAPHY
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6037/3

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INSTRUCTIONS TO CANDIDATES

This insert contains a base map for use with question 5.

This insert consists of 2 printed pages and 2 blank pages.

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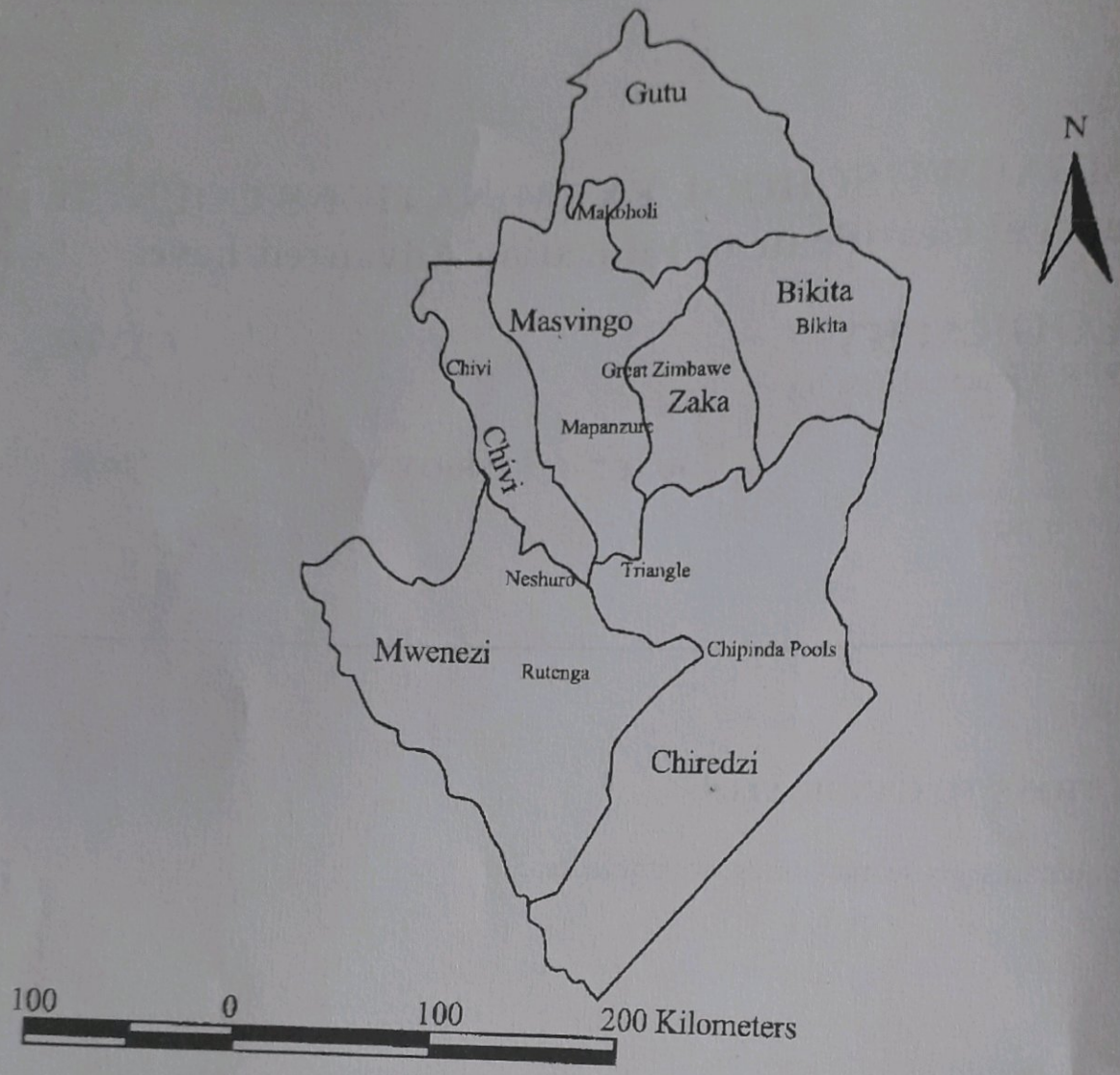

Masvingo province