UNIVERSITY OF SWAZILAND DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

FINAL EXAMINATION:

MAY 2006

B.Sc. III

TITLE OF PAPER

: DRAINAGE BASIN STUDIES

COURSE NUMBER

: GEP 321

TIME ALLOWED

THREE (3) HOURS

INSTRUCTIONS

SECTION A IS COMPULSORY

ANSWER ANY TWO QUESTION S FROM

SECTION B

ILLUSTRATE YOUR ANSWERS WITH

APPROPRIATE DIAGRAMS

MARKS ALLOCATED

QUESTION 1 CARRIES 40 MARKS

THE OTHER QUESTIONS CARRY 30

MARKS EACH

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

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SECTION A: COMPULSORY QUESTION

Question 1:

(a) Explain the major knowledge areas that are focal in drainage basin planning.

(20 marks)

(b) Explain the key components of a vision statement in drainage basin planning.

(20 marks)

(40 marks)

SECTION B: ANSWER ANY TWO QUESTIONS

Question 2:

'The environment is considered a legitimate user of water'. Discuss. (30 marks)

Question 3:

Describe and explain two methods of estimating the available water resources of a drainage basin.

(30 marks)

Question 4:

Explain how sediment is measured in a stream.

(30 marks)

Question 5:

Discuss the importance of drainage basin management.

(30 marks)