

**UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING**

**FINAL EXAMINATION: MAY, 2008
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 QUESTIONS 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**

SECTION A: COMPULSORY QUESTION

Question 1:

Discuss why a drainage basin is regarded as

- (i) a hydrologic unit. (14 marks)
 - (ii) a geomorphologic unit. (13 marks)
 - (iii) a planning unit. (13 marks)
- (40 marks)**

SECTION B: ANSWER ANY TWO QUESTIONS

Question 2:

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

Question 3:

Explain how the fluvial system variables influence the geomorphology of a drainage basin. (30 marks)

Question 4:

Explain how water conservation can be effected in a drainage basin. (30 marks)

Question 5:

Examine the origins of the Zambezi Action Plan.

(30 marks)