

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

**MAIN EXAMINATION: MAY, 2010
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

- (a) Explain the major knowledge areas in drainage basin planning. (20 marks)
 - (b) Discuss the key components of a vision statement in drainage basin planning. (20 marks)
- (40 marks)**

SECTION B: ANSWER ANY TWO QUESTIONS

Question 2

Describe the major drainage basins in Swaziland and their influence on socio-economic development. (30 marks)

Question 3

'Needs assessment in drainage basin studies is very important'. Discuss the validity of this statement. (30 marks)

Question 4

Discuss the factors that influence the sediment yield of a drainage basin. (30 marks)

Question 5

Analyse the methods used to evaluate the water resources in a catchment. (30 marks)