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UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEORAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

SUPPLEMENTARY EXAMINATION: JULY, 2016

B.Sc. III

TITLE OF PAPER : DRAINAGE BASIN STUDIES

COURSE NUMBER : GEP 321

TIME ALLOWED : THREE (3) HOURS

INSTRUCTIONS : QUESTION1 IS COMPULSORY
ANSWER TWO QUESTION FROM SECTION B
ILLUSTRATE YOUR ANSWERS WITH
APPROPRIATE DIAGRAMS

MARKS ALLOCATED : QUESTION 1 CARRIES 40 MARKS OTHER
QUESTIONS CARRY 30 MARKS EACH

GEP 321: DRAINAGE BASIN STUDIES

(July 2016)

SECTION A: COMPULSORY QUESTION

QUESTION 1

- a) 'A drainage basin is regarded as geomorphologic, hydrologic as well as a planning unit'. Discuss the validity of this statement. (20 marks)
 - b) Explain how drainage basin characteristics are determined. (20 marks)
- (40 Marks)**

SECTION B: ANSWER ANY TWO QUESTIONS

QUESTION 2

- a) Explain the factors that influence the sediment yield of a catchment. (15 marks)
 - b) Discuss the importance of knowing the sediment yield of a catchment. (15 marks)
- (30 Marks)**

QUESTION 3

'Drainage basin management is important'. Discuss. **(30 Marks)**

QUESTIO 4

- a) What do you understand by the term 'Regime of a river'? (10 marks)
 - b) Explain the factors influencing changes of the morphology of a river channel. (20 marks)
- (30 Marks)**

QUESTION 5

Discuss the major drainage basins of Swaziland with emphasis to economic development.