



SIR ARTHUR LEWIS COMMUNITY COLLEGE
ACADEMIC YEAR (2024/2025) – SEMESTER ONE
END OF SEMESTER EXAMINATION

COURSE CODE : GEO216
COURSE TITLE : HYDROLOGY
LECTURER(S) : MRS. JOSEPH-BISCETTE
DATE : TUESDAY 17TH, DECEMBER, 2024
TIME : 9:00 AM
DURATION : 2 HOURS
STUDENT ID # : _____

GENERAL INFORMATION AND INSTRUCTIONS

- Students must sign **IN** and **OUT** on the examination class list.
- Write your ID number on the question paper.
- This paper has 5 questions. Answer **ALL** questions.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

1. Draw an annotated diagram to illustrate the formation of either:

(a) Wavecut platform

or

(b) Cave, arch, stack and stump

6 marks

2. (a) Explain TWO ways in which the process of wave refraction influences the development of coastal landforms.

4 marks

(b) Distinguish between a tombolo and a bay mouth bar.

3 marks

3. (a) Explain how seasonal variations affect the water budget within a drainage basin.

4 marks

- (b) Provide an example of a positive and a negative water balance.

2 marks

4. (a) Outline the role of storm hydrographs in hydrology.

2 marks

- (b) Discuss why basin lag time differs between an urban area and a rural area.

4 marks

5. Write an essay of 500 words on the following topic:

"Coastal zone management is a multifaceted field which can be effective through an integrated management approach."

In your essay, examine the importance for coastal zone management in the Saint Lucia. Using examples, discuss at least **TWO (2)** impacts of **ONE (1)** natural and **ONE (1)** human modification for coastal sustainability on the island.

[illegible]

[illegible]

25 marks

Total 50 marks

END OF EXAM