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FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING
2014/2015 RAIN SEMESTER EXAMINATION

Course Title: Laboratory Techniques in Physical Geography

Course Code: GRP 316

Instruction: Answer all questions in section A and any two (2) questions of your choice in section E

Time Allowed: 2 hours

SECTION A: Compulsory (40 marks)

1) Assume a 25kilometre stretch river flowing at a mean velocity of 2.5 metres per second is found to have an average width of 7.5 metres and a mean depth of 525centimetres, and at the bank a 20 centilitres water jar is completely dispensed in 6 minutes. Calculate the:

- (i) average width-depth ratio
- (ii) total channel volume
- (iii) mean discharge
- (iv) number of times a 10-year flood may occur in a 40 year period?
- (v) infiltration rate

2) Examine the importance of sampling in the field and laboratory techniques of physical geography.

3) Highlight ten (10) weather observation instruments and describe any five (5) of your choice.

SECTION B: Optional (30 marks)

4) Describe the monitoring of fluvial and hydrological processes.

5) Write short notes on the field methods in the analysis of the following:

- (i) Soil
- (ii) Plant

6) Critically examine the soil profile and the relevance to human activities.

7) Elucidate on the significance of fieldwork in physical geography.

8) State and explain three (3) major approaches to vegetation studies, providing relevant examples.