UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE

Level III Semester II - Dec/Jan 2015/2016

OCG3212- Geological Oceanography Answer <u>four (04)</u> questions

Time: 02 hours

Section A – Answer all questions

01. a. What is the definition of mineral?

(5 Marks)

b. How do minerals form?

(5 Marks)

c. How do physical properties can be used to identify minerals?

(10 Marks)

02. Distinguish between any four of the following pairs.

 $(4 \times 5 = 20 \text{ Marks})$

- a. Conglomerate and Quartzite
- b. Limestone and Marble
- c. Clastic and Non-clastic sedimentary textures
- d. Shale and Schist
- e. Rock fall and Rock slide
- f. Graded bedding and Cross bedding

Section B – Answer any two (2) of the following.

03. Write short notes on any two of the following.

 $(2 \times 15 = 30 \text{ Marks})$

- a. Causes of landslides.
- b. Optical Properties of Minerals
- c. X-ray diffraction (XRD) method for mineral identification

04. i. What is a Volcano?

(5 Marks)

ii. Where do we find volcanoes?

(5 Marks)

iii. Why do some volcanoes erupt explosively while others erupt non-explosively?

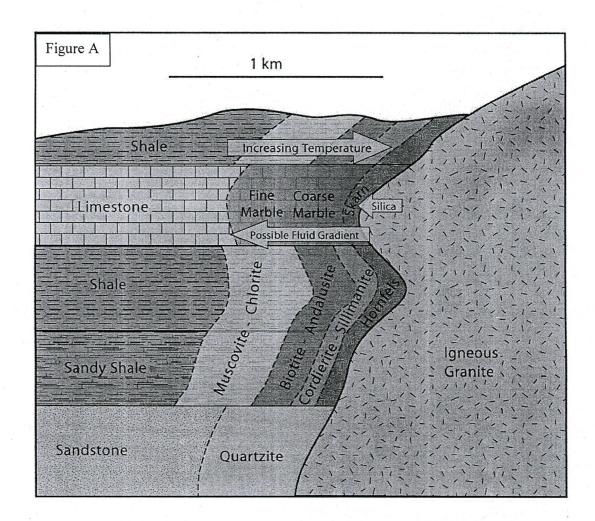
(10 Marks)

iv. How does silica content of magma affect volcanic landforms?

(10 Marks)

05. Figure A given below shows the (cross sectional) lithological variations of a certain area. Explain lithological settings and hypothesize possible geological evolution model for the area with proper justifications. (Maximum 2 pages).

(30 Marks)



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