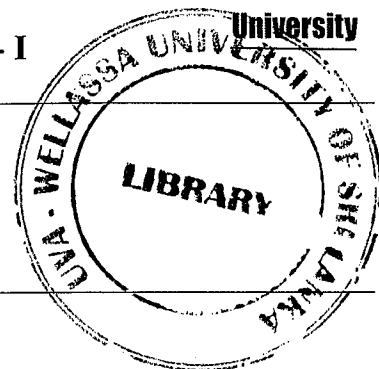


Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
1st Year 2nd Semester Examination – Jan./Feb. 2016



**Uva Wellassa
University**

MRT 112-1 Mineralogy and Petrology - I



Number of Questions : **Two** (02)

Answer **all** questions

Time Allocation : One (01) hour

Total Marks : 100

Illustrate your answers with sketches/diagrams where necessary

1.

- a. Give the chemical classification of minerals. Describe the chemical composition, physical properties and common uses of three (03) minerals each, from selected three (03) groups.
- b. Discuss the atomic build up of minerals with particular emphasis on lattices, atomic/ionic coordination and bonds.
- c. Relate physical properties of minerals to their chemical composition and crystal structure.
- d. Differentiate pyroxene and amphibole groups of minerals.
- e. Describe what qualities and properties make a mineral a gemstone.

(50 mark)

2.

- a. Describe the successive steps in sedimentary rock formation.
- b. How do you diagnose the metamorphic grade of a suite of metamorphic rocks?
- c. Briefly describe different types of metamorphism.
- d. Illustrate four (04) common igneous structures.
- e. Distinguish between textures of intrusive and extrusive rocks. Explain the reasons for their marked differences.

(50 mark)