



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2015/2016

SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN EARTH SCIENCE WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

NGA 207: INTRODUCTION TO PETROLOGY

Date: 8th January, 2016

Time: 8.30 - 10.30 am

INSTRUCTIONS:

- Answer question ONE and any other TWO questions.
- Sketch maps and diagrams should be used whenever appropriate.

NGA 207: INTRODUCTION TO PETROLOGY

1. a) Explain the differences between rock, minerals and mineraloids. 6marks
b) Examine any 3 methods used in the classification of igneous rocks. 6marks
c) Describe the rock cycle and explain its significance in petrology. 8marks
d) Explain five geological factors requisite for a petroleum prospect. 10marks
2. Compare the formation of magma with melting of minerals. 20marks
3. Discuss the main methods used in the classification of metamorphism. 20marks
4. a) Explain ways in which geologists interpret sedimentary rocks. 6marks
b) Examine features of sedimentary rocks that give clue to the environment of deposition. 14marks
5. Examine the procedure for surface and subsurface exploration of petroleum. 20marks
6. a) Briefly describe the three types of plutons. 10marks
b) Describe the formation of clastic sedimentary rocks. 10marks