

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF PHYSICAL SCIENCES
DEPARTMENT OF GEOLOGY

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BTech GEOLOGY, 2015/2016 SESSION

Course: GEL 213 (Introduction to Igneous Petrology)
Date: 6th April, 2016.

Unit: 2
Time Allowed: 2 hours

Instructions: Answer any three questions of your choice. All questions carry equal marks.

1. (a) Define the term petrology.
(b) List the two main areas of petrology.
(c) Explain in detail the two main areas of petrology listed in 1b above.
2. (a) Define the following terms as used in igneous petrology:
(i) Magma
(ii) Melt
(iii) Primary magma
(iv) Primitive magma
(v) Parental magma
b. Write short notes on ultramafic rocks.
3. (a) List the three types of observations which may influence the name given to a rock.
(b) Enumerate any four ways in which igneous rocks are classified.
(c) Briefly explain any three of the ways igneous rocks are classified listed in 3b above.
4. (a) What do you understand by magma differentiation?
(b) List any five magma differentiation processes.
(c) Discuss in detail any one of the differentiation processes mentioned in 4b above.
5. Write an essay on magma generation using a very good diagram to support your answer.