ELIZADE UNIVERSITY, ILARA-MOKIN

ONDO STATE

FACULTY: BASIC AND APPLIED SCIENCES

DEPARTMENT: PHYSICAL AND CHEMICAL SCIENCES

FIRST SEMESTER EXAMINATIONS

2015/2016 ACADEMIC SESSION

COURSE CODE: AGY 309

COURSE TITLE: GENERAL PETROLOGY

DURATION: 2 ½ Hours

HOD's SIGNATURE mbeelo

TOTAL MARKS: 60

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS IN ALL. *APPROPRIATE ILLUSTRATIVE DIAGRAMS WILL BE REWARDED*

1. (a) What are clastic sediments?
   (b) Describe how loose clastic sediment becomes lithified to form sedimentary rock.
   (c) Differentiate between conglomerate and breccias.

2. (a) Define weathering.
   (b) Explain four processes that cause mechanical weathering of rocks.
   (c) List the products of weathering in order of decreasing size.

3. (a) What is metamorphism?
   (b) How does contact metamorphism differ from regional metamorphism?
   (c) Name and describe briefly the succession of metamorphic rocks that form as shale experiences progressively higher grades of regional metamorphism.

4. (a) Using illustrative diagram, explain the difference between a dyke and a sill.
   (b) What do the terms felsic, mafic, ultramafic, and intermediate mean?
   (c) Explain the rock cycle.

5. (a) What is magma?
   (b) Explain three main processes that melt rock to form magma.
   (c) How would you distinguish a volcanic rock from a plutonic rock in the field?

6. (a) What is a mineral?
   (b) What properties distinguish minerals from other substances?
   (c) List five physical properties of minerals useful for identification.