

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 514 (ADVANCED SEDIMENTARY PETROLOGY)

UNIT: 3

DATE: 16th April, 2016.

Time Allowed: 2 Hours

Instructions: Answer Any Three Questions

1. Write explanatory notes on the main components of sandstones.
2. Write explanatory notes on the main components of limestones.
3. a) Define diagenesis.
b) Explain the following diagenetic regimes with specific examples of mineral assemblages as they occur in sandstones:
 - i. Eugenesis.
 - ii. Mesogenesis.
 - iii. Telogenesis.
4. Briefly discuss the following classification schemes:
 - i) Dunham (1962) limestone classification.
 - ii) Folk (1959) graphic classification scheme of limestone.
 - iii) Sandstone classification scheme based on Folk (1975).
5. With the aid of well labelled sketches, briefly explain diagenesis of sandstone in terms of cementation, mechanical and chemical compaction.