

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

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BTech GEOLOGY
2017/2018 SESSION

COURSE CODE: GEL 314

UNIT: 3

COURSE TITLE: STRATIGRAPHY

INSTRUCTIONS: ANSWER ANY THREE QUESTIONS.

TIME ALLOWED: 1 HOURS 30 MIN.

DATE: 3RD APRIL 2018

- 1 (a) (i) Define Stratigraphy. (ii) Discuss the applications of Stratigraphy.
 (b) (i) Explain the concept of formation.
 (ii) Distinguish between Synchronous and Diachronous surfaces.
- 2 (a) (i) Explain the biostratigraphic technique of subdividing the Sedimentary record.
 (ii) Define a biozone.
 (b) Explain the following:
 (i) Depositional sequence.
 (ii) Parasequence.
 (iii) Assemblage biozone.
- 3 Discuss Conformable and Unconformable vertical lithostratigraphic contacts.
- 4 (a) Explain the following stratigraphic principles:
 (i) Law of original horizontality.
 (ii) Principle of lateral continuity.
 (b)
 (i) Explain the concept of geohistory analysis.
 (ii) Distinguish between Static and Dynamic geohistory analysis.
- 5 (a) Arrange lithostratigraphic units in hierarchical order, starting with the highest ranking unit at the top.

 (b) Discuss lateral lithostratigraphic contacts.
 (c) Discuss the applications of geohistory analysis.