

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

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BTECH (GEOLOGY), 2016/2017  
SESSION

COURSE: GEL 522 (MARINE GEOLOGY) UNIT: 3

DATE: 16<sup>TH</sup> OCTOBER, 2017

TIME ALLOWED: 3 Hours

INSTRUCTIONS: Answer question 1 and any other three questions.

1. (a) Discuss in detail the procedures for sequence stratigraphic analysis.  
(b) Write short notes on the following:
  - (i) Sequence Boundary.
  - (ii) Highstand Systems Tracts (HST)
2. (a) Describe the ocean basin floor.  
(b) Comment on oceanic sediments.
3. (a) Name five (5) physical and chemical properties of sea water.  
(b) Describe how salinity and density are measured.
4. Give an account of sea level changes, causes and resolutions.
5. (a) Discuss the causes and benefits of oceanic upwelling.  
(b) Give an illustrative diagram of the marine and marginal marine (paralic) environments.
6. (a) Discuss the Mid-Ocean Ridge Systems of the ocean.  
(b) Describe the dredge and grab sampling methods of the ocean.