

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

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BTech GEOLOGY,**  
**2017/2018 SESSION**

**COURSE CODE:** GEL 522

**UNIT:** 3

**COURSE TITLE:** MARINE GEOLOGY

**INSTRUCTIONS:** ANSWER ANY FOUR QUESTIONS

**TIME ALLOWED:** 2 HOURS 30 MINUTES

**DATE:** 10<sup>th</sup> Sept. 2018

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- 1(a) Discuss the mineral resources of the ocean.
- (b) List four each of shoreline wave produced erosional and depositional features.
- 2(a) Describe the incised valley/canyon systems of the eastern and western Niger Delta Basin.
- (b) Describe the grab method of sampling the ocean floor.
- 3(a) Write an explanatory note on oceanic sediments.
- (b) Explain the term coral reef and provide illustrative diagrams of the three main types of coral reefs and their evolutionary stages.
- 4 Describe the ocean basin floor and the associated features.
- 5(a) Discuss the causes and benefits of oceanic upwelling.
- (b) Define coastal management.
- 6(a) Explain two types of ocean currents.
- (b) Discuss briefly the measurement of the density of the ocean water.