

**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 516**

**UNIT: 2**

**COURSE TITLE: MINING GEOLOGY**

**INSTRUCTIONS: ANSWER ANY THREE QUESTIONS**

**TIME ALLOWED: 2 HOURS**

**DATE:**

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1. Explain the various processes involved in the following;
  - a) Mineral prospecting,
  - b) Exploration for mineral resources
  - c) Processing of minerals.
2. Write brief notes on the following:
  - a) Factors that determine the extraction cost of a mineral
  - b) Main players in the Mining Industry.
  - c) Environmental effects of mining.
3. Explain the geological conditions that influence the selection of techniques to be employed in the delineation of mineral prospects and production of mineral models for ease of mining method selection.
4. (a) Mention and discuss the factors that influences the choice of mining method to be employed in any mining operation.  
(b) List the three (3) components of mining and discuss any two.
5. (a) Discuss the various stages involved in the life cycle of mining.  
(b) List five mining methods and discuss in detail the various sub- classifications of the underground mining method