



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**FACULTY OF SCIENCES**

**DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT**

**Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**

**POP EXAMINATION 2022\_2**

**COURSE CODE: ESM 422**

**COURSE TITLE: Resource Evaluation**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**SET B**

**Instruction:** Attempt question number ONE (1) and any other TWO (2) questions. Question number one (1) carries 30 marks, while the other questions carry (20) marks each.

- QUESTION 1**
- Mention any two igneous processes
  - Explain the role biological processes in landform development
  - List the techniques of Quantitative Geomorphology
  - Explain the term Geomorphometry
  - Enumerate the implementation steps in Geomorphometry
  - Explain the term terrain

- QUESTION 2**
- Explain the application of digital elevation model (DEM) in Geomorphometric analysis
  - Explain seismic refraction
  - Mention any two types of refraction method

- QUESTION 3**
- Explain the environmental impact of refraction seismic survey
  - State the advantage of refraction seismic survey
  - State the disadvantages of refraction seismic survey

- QUESTION 4** Write explanatory note the following
- DC Resistivity
  - Self Potential (SP)
  - Electromagnetic (EM)

- QUESTION 5**
- Define solid mechanics
  - Explain landscape evolution model

c. Explain the advantages of Seismic Techniques