

CRAWFORD UNIVERSITY  
FAITH CITY, IGBESA, OGUN STATE, NIGERIA



COLLEGE OF NATURAL AND APPLIED SCIENCES  
RAIN SEMESTER EXAMINATIONS, 2018/2019 SESSION  
B.Sc. GEOLOGY AND MINERAL SCIENCES

GEM 478- ADVANCED GLOBAL TECTONICS AND STRUCTURES      UNITS: 2 UNITS  
TIME ALLOWED: 2HOURS:30MINS

1. Describe, with the aid of clearly labelled diagrams, the 3 types of plate boundaries. (15 marks)
2.
  - a. Explain plate tectonics. (10 marks)
  - b. Highlight the driving force behind plate tectonics. (5 marks)
3.
  - a. Define Thermo-Remanent magnetization. List out the methods by which magnetic signatures in rocks can be recorded. (10 marks)
  - b. Give a detailed explanation of the Earth's magnetic field. Highlight its importance. (5 marks)
4.
  - a. Geothermal gradient is associated with change in temperature. Explain. (5 marks)
  - b. Highlight the 3 sources of heat within the Earth. (10 marks)
5.
  - a. Define Seismicity. (5 marks)
  - b. Explain the processes of Orogenesis. (10 marks)
6.
  - a. Discuss earthquakes and the forces responsible for them. (10 marks)
  - b. How could earthquakes be measured? (5 marks)