



CRAWFORD UNIVERSITY

Faith-City, Igbesa. Ogun state

College of Natural and Applied Sciences

B.Sc. (Hons) Geology & Mineral Sciences Degree Examinations

Rain Semester 2020/2021 Session

GEM 478 (Advanced Global Tectonics and Structures)

Units: 2 Units

Instruction: Answer Four (4) Questions. Time Allowed: 2 Hours 30 Minutes

1. With the aid of clearly labelled diagrams, describe 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 and 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. Describe, in detail, earthquakes and the forces responsible for them. (10 marks)
 - b. How are earthquakes measured? (5 marks)