



**CRAWFORD UNIVERSITY**  
**FAITH CITY, IGBESA, OGUN STATE**  
**COLLEGE OF NATURAL AND APPLIED SCIENCES**  
**DEPARTMENT OF PHYSICAL & EARTH SCIENCES**  
**GEOLOGY AND MINERAL SCIENCES**  
**Rain Semester Examinations (B.Sc. Degree), 2017/2018**

**Course: GEM 202: Optical Mineralogy      Units: 2Units**

**Time Allowed: 2Hrs:30Mins.**

**Instruction: Attempt all Questions**

**PART (A) THEORY**

- 1 a) Differentiate between isotropic minerals and anisotropic minerals
  
- 2 Write short notes on:
  - a) Pleochroism
  - b) Extinction
  - c) Twinning
  - d) Relief of a mineral
  
- 3 List the optical properties of minerals that can be observed under:
  - a) Plane polarised light
  - b) Crossed-nicols

**PART (B) PRACTICAL**

- 4 Using the Thin Section provided, study critically and identify the mineral assemblages in slide E and F.