VIII. Dynamic analysis and stress

A. Force and stress

- a) Units of force
- b) Units of stress

B. Stress on a plane

- a) Normal stress
- b) Shear stress

C. State of stress at a point

- a) Hydrostatic and Lithostatic stress
- b) Non-hydrostatic and differential stress
- c) Stress axes
- d) Effective stress
- e) Stress regimes

D. Stress-strain relationships

- a) Experimental vs. geological strain rates
- b) Elastic
- c) Brittle
- d) Plastic
- e) Viscous
- f) Competence

IX. Joints

A. Character and importance of joints

B. Features of joints

Orientation and organization Features of joint surfaces: Plumose structure Joint-filling materials: veins

C. Typical occurrence and origin of joints

Primary joints in igneous rocks` Joints around Intrusions Joints associated with erosion, exhumation Joints related to faults Joints related to regional folding