

VIII. Dynamic analysis

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

D. Stress-strain relationships

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

IX. Joints

A. Character and importance of joints

B. Features of joints

Orientation and organization

Features of joint surfaces: Plume 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