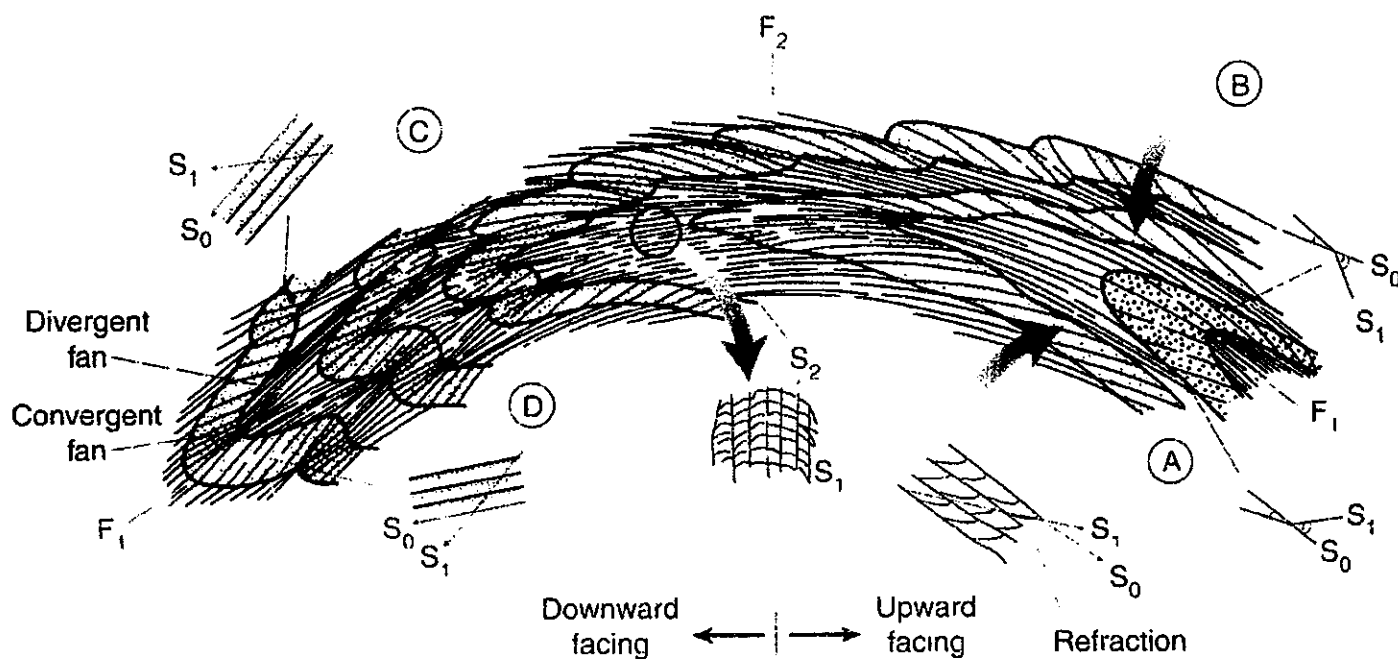


1. Explain the following terms (40%)  
 (1) Growth fault; (2) Reverse fault & thrust fault; (3) Antiformal syncline & synformal anticline; (4) Simple shear & pure shear; (5) Mylonite & pseudotachylite; (6) Heave & throw; (7) Kink band & Chevron folds; (8) Tear fault & lateral ramp; (9) pencil cleavage & slaty cleavage; (10) stress & strain.
2. Explain the mechanism of mud diapir and what kinds of structures associated with mud diapir. (10%)
3. Why out-of-sequence thrusting occurs? Explain it with Critical Wedge Model and 1999 Chi-Chi earthquake. (10%)
4. Explain the angular relationship between cleavage and bedding at sites A, B, C, and D. Can this structure explain the genetic relationship between the cleavage and the folding? (10%)



5. Drawing and explain the shear sense indicators in a "sinistral shear zone" including brittle and ductile structures. (10%)
6. Draw and explain the combined fracture criteria in Mohr space (Griffith, Coulomb and Von Mises Criteria). (10%)
7. What is hydraulic fracturing? Explain it in terms of pore pressure and tensile cracks. (10%)

試題隨卷繳回