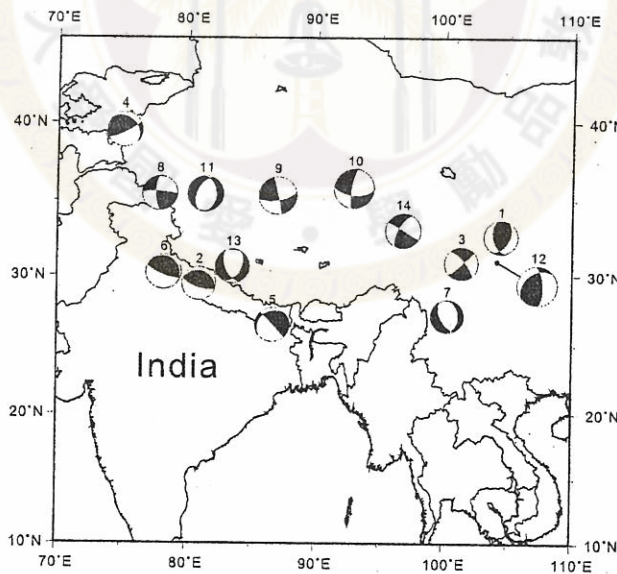


一、解釋名詞 (30%)

- (1) Shallow fault rocks; (2) Blind thrust; (3) Restraining bend; (4) Fault-propagation folds; (5) Lineation.

二、計算及問答題 (70%)

- (1) 有一尖頂褶皺(kink fold)北翼的位態為北偏東 30 度 45 度向南傾斜，南翼的位態為北偏西 60 度 45 度向北傾斜，請計算褶皺軸的方位及傾角(Plunge)。(10%)
- (2) 試說明滑脫斷層 (décollement or detachment fault)及其在大地構造上代表的意義。(10%)
- (3) Explain the mechanism of buckle folds? What are the dominant factors for controlling the wavelength of buckle folds? (10%)
- (4) Please explain the effect of pore pressure on shear failure and frictional sliding. (10%)
- (5) The following figure shows the 14 M > 6.5 destructive earthquakes of shallow depth from 1976 to 2010 in Tibetan Plateau and Himalaya due to the collision between India and Asia. Please explain the tectonic regime and implication based on focal mechanisms (with the number above the beach balls) of these earthquakes in this area. (10%)



- (6) Please explain how blueschist form at the base of accretionary wedge and be brought to the surface of wedge. (10%)
- (7) What are the Mylonite and mylonitic foliation? (10%)

試題隨卷繳回