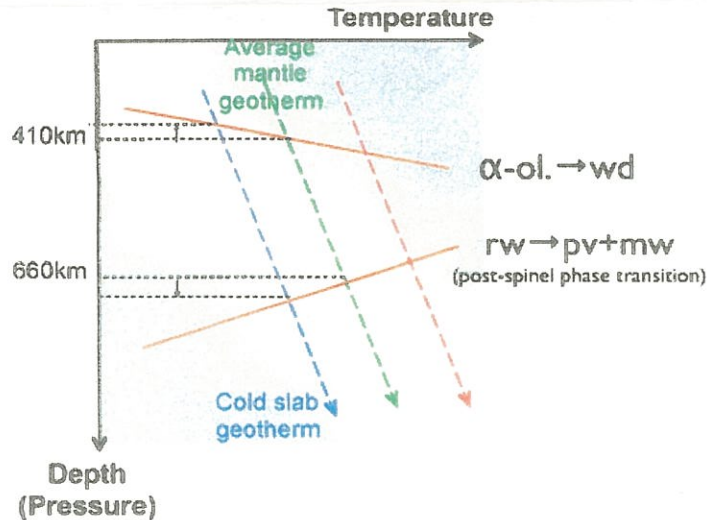


1. 請簡述板塊運動學說，並說明台灣所處的板塊邊界特性 (15%)
2. 請簡述地球內部的三個主要分層的介面，並說明利用那些地球物理方法可以發現這些介面? (15%)
3. Please explain
 - (1) Compensation depth (in the context of gravity anomaly) (5%)
 - (2) Free oscillation of the Earth (5%)
 - (3) Seismic anisotropy (5%)
 - (4) Ridge push and Slab pull (in the context of mantle convection) (5%)
 - (5) Gutenberg-Richter law (5%)
4. (1) What is the "earthquake self-similarity" (5%)
(2) What is the general basis for the "earthquake self-similarity"? (5%)
5. The T-P conditions for phase transitions at 410 and 660 km are shown below in solid lines. Please state how the subducting slabs are affected by phase transition boundaries when passing these two discontinuities (10%)



6. 請說明地震學家如何利用表面波的頻散特性解析岩石圈內不同深度的震波速度構造 (10%)
7. 請任選一項你感興趣的研究議題，並說明可能的研究目標及研究方法 (15%)
(e.g., seismic source, tomography, noises, geodesy, gravity ... etc)

試題隨卷繳回