

國立中央大學97學年度碩士班考試入學試題卷

所別：太空科學研究所碩士班

科目：電離層物理 共 1 頁 第 1 頁

*請在試卷答案卷(卡)內作答

1. Terminology (40%)
 - (1) the spread F
 - (2) airglow and aurora
 - (3) the ionosphere, the plasmasphere, and magnetosphere
 - (4) ionospheric disturbance and ionospheric storm
 - (5) the magnetoionic theory
 - (6) traveling ionospheric disturbance
 - (7) Faraday rotation
 - (8) VHF, HF, and ULF
 - (9) Irregularity and instability
 - (10) TEC, NmF2, HmF2
2. State mechanisms of the ionospheric formation. (15%)
3. State synoptic variations of the ionosphere. (10%)
4. Draw an ionogram with traces of the O- and X-mode in the E-, F1-, and F2-region as well as the Es layer. (10%)
5. State the echo mechanism and function of an incoherent scatter sounder, VHF radar, and ionosonde for ionospheric observations. (15%)
6. State the scientific missions and payloads for ionospheric studies on the FORMOSAT-1, -2 and -3. (10%)

參考用