## 〈微方〉資格考範圍

- 1. Fundamental Theory: Existence and uniqueness of solutions, Continuity of solutions with respect to parameters, differential inequality.
- 2. Linear System: Linear System with Constant Coefficients and Periodic Coefficients, Floquet Theory, Phase Portrait of 2-D Autonomous System
- 3. Linear Stability Theory
- 4. Lyapunov Stability Theory
- 5. Periodic Solutions of 2-D Autonomous System:
  - (1) Poincare-Bendixson Theorem (2) The Levinson-Smith Theorem
- 6. Boundary Value Problems

## 參考書目:

- 1. Ordinary Differential Equations, 作者: Miller and Michel
- 2. Ordinary Differential Equations (2nd ed.), 作者: P. Hartman