CE 503: Computational Methods in Water Resources Engineering Lab (0- 0-6-3)

Suggested list of experiments:

1. Computational experiments for nonlinear equations, interpolation, differentiation and evaluation.
2. Computational experiments for initial and boundary value problems by finite difference method.
3. Computational experiments for Newton's method, variation and weighted residual methods.
4. Simple computer models for; surface water systems, subsurface water system.
5. Computational experiment for Irrigation engineering and management
6. Computational experiment for coastal engineering problems

References:

1. Scarborough, J. B., *"Numerical mathematical analysis",* Oxford & IBH Publishing CO Pvt.
2. Jain, K. K., Iyengar, S. R. K., *"Numerical methods-problem and solutions",* Wiley eastern limited.