We establish conditions which lead to the uniqueness and existence of solutions of y(n) = f(t, y, y', ..., y(n-1)) for various boundary conditions. The boundary conditions include conjugate, focal, Sturm-Liouville, and Lidstone type conditions. It will be assumed that the function f is bounded and that solutions exists and are unique for linearized versions of the problems. (Received September 23, 2005)