Graduate Study Course EP716 Reactor Thermal-Hydraulics Design

Student:		Test#1
Date:	23 Oct 2002	Reactor materials, reactor types.
Scope:		 1. List and explain the following for the materials for reactor coolants, moderators and fuel sheet: Requirements, Alternative materials, and How each of the alternative materials meets the requirements. [35 points] 2. List and explain the important design features of the reactor types shown in the attached sheet, and emphasize differences in design parameters of most significance. [40 points] 3. Explain in a brief outline development strategy for nuclear power application for two different countries: one highly developed (with no capacity for fuel enrichment) but developed infrastructure, R&D services, and economic potential, and one for a developing country with low infrastructure, no R&D capability and low but growing economic potential. Focus on the following issues: Type of reactor Type of reactor Reactor power Fueling arrangements Maintenance Staff training 125 points]