KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS COLLEGE OF COMPUTER SCIENCE AND ENGINEERING **COMPUTER ENGINEERING DEPARTMENT** COE 445 – (Term 053)

Assignment #1

Name:_____ ID:

Due 07/07/2006

- Q1. Perform an information survey on the internet2 using whatever information source is available to you (www, books, magazines, etc ...). The goal of the research is to come up with information about :
 - internet2 architecture
 - implementation of QoS
 - security
 - addressing and naming policy
 - extra features not available in current internet
 - ...
- Q2. The WLAN technology can be used as an internet access technology by ISPs to their customers. Discuss the positive and negative implications of using this technology.
- Q3. A DSL modem Access Multiplexer (DSLAM) must be located in the Central Office of the Local Exchange Operator that is directly connected to the customers through the local loops (Unshielded Twisted Pair telephone line). However, this requirement is not necessary for the dial-up service where the modem pool can be located anywhere. This is illustrated by the fact that the DSL service provider will send a technician to install the DSL modem at the customer's site while the dial-up service provider will only have to advertise a dial-up phone number. The dial-up service uses, in many instances, a single nationwide phone number. Explain why the DSLAM must be located in a specific location while the dial-up modem pool can be located anywhere around the PSTN (Public Switched Telephone Network).