EL-GY 5373 Pop Quiz Three

Name: _____   Student ID: _____

I. Answer True or False to the following questions:
1. A higher layer protocol may use the service by different lower layer protocols.
   a) True   b) False
2. DNS (Domain Name System) is used to translate an IP address to the corresponding MAC address
   a) True   b) False

II. Select ALL CORRECT answers for the following questions.
1. To build an N-node fully-connected network, how many point-to-point full-duplex links are needed?
   a) N
   b) N!
   c) N(N-1)/2
   d) N^2
2. Referrinf to the "Simple" File Transfer example discussed in class (slides for Chapter 0), which of the following is (are) stated correctly?
   a) The source host, mng.poly.edu as discussed, uses DNS to learn IP address of the destination host (photon.poly.edu).
   b) The source host determines whether the destination host is in the same (sub)network.
   c) The source host knows its default router.
   d) The source host uses ARP to learn MAC (hardware) address of the destination host.
3. In a destination host, the TCP/IP protocols deliver application data by checking
   a) Port number(s)
   b) Protocol number/type
   c) IP address(es)
   d) MAC (hardware) address(es)
4. In packet switching, when a packet arrives at a switching node, how does the switching node determine the output port to forward this packet?
   a) Based on pre-established circuit
   b) Based on the header of the packet
   c) Based on the data/payload part of the packet
   d) Based on the trailer of the packet