



COLLEGE OF ENGINEERING & TECHNOLOGY

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Course : Communication Networks

Course Code : EC 553

url: <http://www.aast.edu/~khedr/Courses/Undergraduate/Communication%20Networks%20EC553/>

Sheet (1)- Overview

- 1- A network contains four computers. If there are only four lengths of cable in this network, which topology is used?
- 2- Which transmission mode (simplex, half-duplex, or full duplex) can be compared to the following?
 - a. A heated argument between Lucy & Desi
 - b. A computer to monitor connection
 - c. A television broadcast
- 3- Which layer is responsible for the following?
 - a. Determining the best path to route packets
 - b. Providing end-to-end communications with reliable service
 - c. Providing node-to-node communications with reliable service
- 4- Give two features that the datalink layer and the transport layer have in common. Give two features in which they differ.
- 5- Describe the five layers of the Internet network model and what they do.
- 6- Multiple choice
 - a) A _____ is a physical communication pathway that transfers data from one device to another
 - Node
 - Message
 - Link
 - Receiver
 - b) A _____ line configuration provides a dedicated link between two devices.
 - Point to point
 - Receiver to sender
 - Multipoint
 - Any of the above
 - c) _____ refers to the way two or more devices attach to a link
 - Line configuration
 - Topology
 - Transmission mode
 - Modulation mode

- d) Which of the following is a basic network topology?
- Star
 - Mesh
 - Ring
 - All of the above
- e) Seven devices are arranged in a mesh topology. _____ physical channels link these devices.
- Seven
 - Six
 - Twenty
 - Twenty-one
- f) In a mesh topology with n devices, if a new device is added, _____ new links are needed.
- $n-1$
 - n
 - $n+1$
 - $2n$
- g) As the data packet moves from the lower to the upper layers, headers are _____
- Added
 - Removed
 - Rearranged
 - Modified
- h) Which layer functions a liaison between user support layers and network support layers?
- Network layer
 - Physical layer
 - Transport layer
 - Application layer
- i) The _____ layer changes bits into electromagnetic signals
- Network layer
 - Physical layer
 - Transport layer
 - Application layer
- j) The process to process delivery of the entire message is the responsibility of the _____ layer.
- Network layer
 - Physical layer
 - Transport layer
 - Application layer