

KING SAUD UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCES COMPUTER SCIENCE DEPARTMENT		
CSC 329: Computer Network	Tutorial 1_ans	2 <sup>nd</sup> Semester 1440-1441
Name:		Student ID:
Serial Number:		Section Number:

### **Part1: Multiple-Choice Questions**

- 1) A \_\_\_\_\_ connection provides a dedicated link between two devices.
  - a. Point-to-point
  - b. Multipoint
  - c. Primary
  - d. Secondary
- 2) The Internet model TCP/IP consists of \_\_\_\_\_ layers.
  - a. Three
  - b. Five
  - c. Seven
  - d. Eight
- 9) The process-to-process delivery of the entire message is the responsibility of the \_\_\_\_\_ layer.
  - a. Network
  - b. Transport
  - c. Application
  - d. Physical
- 10) The \_\_\_\_\_ layer is the layer closest to the transmission medium.
  - a. Physical
  - b. Data link
  - c. Network
  - d. Transport
- 11) Mail services are available to network users through the \_\_\_\_\_ layer.
  - a. Data link
  - b. Physical
  - c. Transport
  - d. Application
- 12) As the data packet moves from the lower to the upper layers, headers are \_\_\_\_\_.
  - a. Added
  - b. Subtracted
  - c. Rearranged
  - d. Modified
- 13) The physical layer is concerned with the transmission of \_\_\_\_\_ over the physical medium.
  - a. Programs
  - b. Dialogs
  - c. Protocols
  - d. Bits

- 14) Which layer functions as a link between user support layers and network support layers?
- a. Network layer
  - b. Physical layer
  - c. Transport layer
  - d. Application layer
- 15) Which of the following is an application layer service?
- a. Remote log-in
  - b. File transfer and access
  - c. Mail service
  - d. All the above
- 16) Protocols are:
- a. the rules that govern data transmissions within and between networks.
  - b. required for successful network to network transmission.
  - c. designed so network devices and software can interoperate with other network devices and their software.
  - d. All of the above.
- 17) The \_\_\_\_ address uniquely defines a host on the Internet.
- a. IP
  - b. port
  - c. specific
  - d. physical
- 18) The \_\_\_\_ created a model called the Open Systems Interconnection, which allows diverse systems to communicate.
- a. IEEE
  - b. ISO
  - c. OSI
  - d. none of the above
- 19) The \_\_\_\_ address identifies a process on a host.
- a. specific
  - b. port
  - c. IP
  - d. physical
- 20) Ethernet uses a \_\_\_\_\_ physical address that is imprinted on the network interface card (NIC).
- a. 32-bit
  - b. 6-byte
  - c. 64-bit
  - d. none of the above

## Part2: Exercises

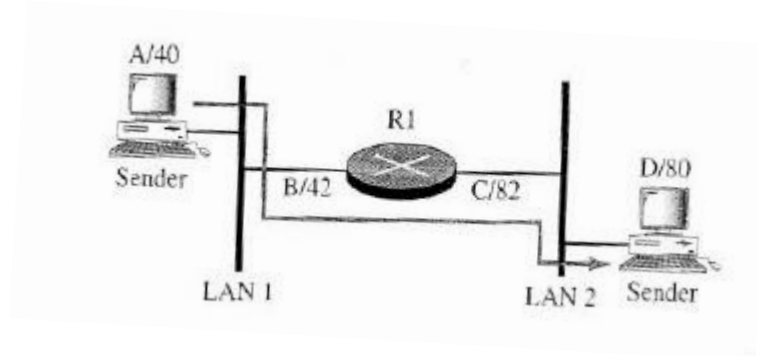


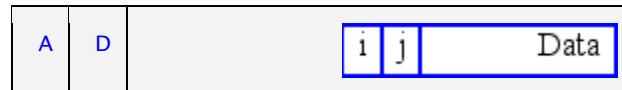
Figure 1

- 1) In Figure 1, assume that the communication is between a process running at computer A with port address i and a process running at computer D with port address j. Show the contents of packets and frames at the network, data link, and transport layer for each hop.

Transport packet :

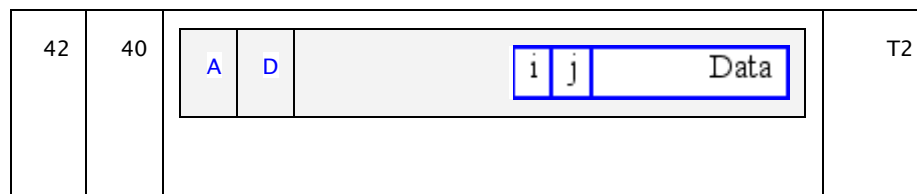


Network packet :



\*most protocols : source then destination

Data link frame send by computer A:



Data link frame send by router 1:

80	82	<table><tr><td>A</td><td>D</td><td colspan="2"><table><tr><td>i</td><td>j</td><td>Data</td></tr></table></td></tr></table>	A	D	<table><tr><td>i</td><td>j</td><td>Data</td></tr></table>		i	j	Data	T2
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