

Dashboard ► My courses ► 2401-COL334 ► 30 July - 5 August ► Quiz1

Started on Friday, 2 August 2024, 9:02 AM

State Finished

Completed on Friday, 2 August 2024, 9:08 AM

Time taken 6 mins 13 secs

Grade 6.00 out of 20.00 (30%)

Question 1

Correct

Mark 2.00 out of
2.00

Congestion control needs to be implemented in a circuit-switched network

Select one:

- ☐ True
- ☒ False ✓

Question 2

Incorrect

Mark 0.00 out of
2.00

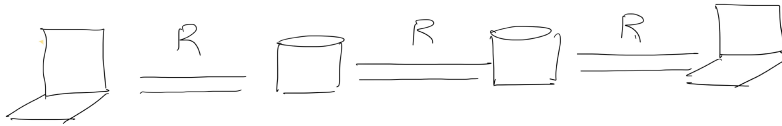
Select all layers that are found in IP protocol stack.

Select one or more:

- ☒ a. Network layer ✓
- ☒ b. Presentation layer ✗
- ☒ c. Session layer ✗
- ☒ d. Link layer ✓

Question 3

Incorrect

Mark 0.00 out of
2.00

Consider a circuit switched network with each link having a single circuit of bandwidth 100 kbps. What is the transmission delay for sending 1 kbit data?

Select one or more:

- ☐ a. 0.02s
- ☐ b. 0.01s
- ☐ c. 0.04s
- ☒ d. 0.03s ✗

Question 4

Incorrect

Mark 0.00 out of
2.00

In-network support for reliability is useful because of the following reasons (select all that apply):

Select one or more:

- ☒ a. Better performance ✓
- ☐ b. Simplifies the router design
- ☐ c. Reduces overall cost
- ☒ d. Reduces application burden ✗

Question 5

Correct

Mark 2.00 out of
2.00

- Transport-layer protocol encapsulates application-layer message, M, with transport layer-layer header (h1) to create a transport-layer ____x____.
- Network-layer protocol encapsulates transport-layer ____x____ with network layer header(h2) to create network layer ____y____.
- Link-layer protocol encapsulates network layer ____y____ with with link-layer header(h3) to create link layer ____z____

x, y, z are:

Select one or more:

- ☒ a.
Segment, Datagram, Frame
✓
- ☐ b.
Frame, Segment, Datagram
- ☐ c.
Datagram, Frame, Segment
- ☐ d.
Frame, Datagram, Segment

Question 6

Incorrect

Mark 0.00 out of
2.00

Which statements are true for end-to-end design principle?

Select one or more:

- ☒ a. It provides greater flexibility in implementing some network services ✓
- ☒ b. It improves the security of the network ✗
- ☐ c. It simplifies application design
- ☐ d. It simplifies router design

Question 7

Correct

Mark 2.00 out of
2.00

Network layer is responsible for providing host-to-host connectivity

Select one:

- ☒ True ✓
- ☐ False

Question 8

Incorrect

Mark 0.00 out of
2.00

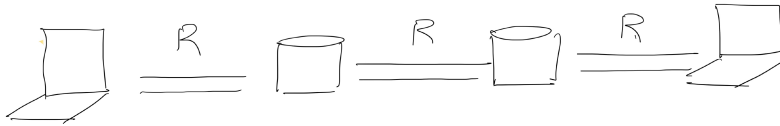
Select all that statements that are true for packet switching.

Select one or more:

- ☒ a.
Guarantees fixed bandwidth for the entire duration of data transfer
✗
- ☒ b. Is more resource efficient ✓
- ☐ c. Resource reservation is done before transmission
- ☐ d. Provides best effort delivery

Question 9

Incorrect

Mark 0.00 out of
2.00

Consider the above network topology, where $R = 100$ kbps. Assume you want to send a data of size 1kbit, what is the total transmission delay in a packet switching approach?

Select one or more:

- ☒ a. 0.01 seconds ✗
- ☐ b. 0.04 secodns
- ☐ c. 0.02 seconds
- ☐ d. 0.03 seconds

Question 10

Incorrect

Mark 0.00 out of
2.00

Consider the following two statements:

S1: Time Division Multiplexing is an example of Circuit Switching

S2: Frequency Division Multiplexing is an example of Packet Switching

Select one or more:

- ☒ A. Both statements are correct ✗
- ☐ B. S1 is incorrect but S2 is correct
- ☐ C. Both statements are incorrect
- ☐ D. S1 is correct but S2 is incorrect