

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

● Lecture 47 : Introduction to Real-Time Communication

● Lecture 48 : Basics of Real-Time Communication

● Lecture 49 : Basics of Networking

● Lecture 50 : Basics of Internet

● Lecture 51 : Real-Time Communication in a LAN

● Lecture Materials

○ Quiz: Week 10 : Assignment 10

● Feedback Form of Week 10

Week 11

Week 12

Assignments Solution

Download Videos

Live Interactive Session

Week 10 : Assignment 10

The due date for submitting this assignment has passed.

Due on 2021-10-06, 23:59 IST.

As per our records you have not submitted this assignment.

1) Which one of the following is NOT an example of soft real-time communication?

1 point

- a. FTP
- b. Email
- c. Web browsing
- d. Internet based banking applications

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

d.

2) Which one of the following statement is TRUE concerning queuing delay?

1 point

- a. Queuing delay is larger than both Propagation delay and Transmission delay
- b. Queuing delay is larger than Propagation delay, but smaller than Transmission delay
- c. Queuing delay is smaller than both Propagation delay and Transmission delay
- d. Queuing delay is smaller than propagation delay but larger than Transmission delay
- e. None of these

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

a.

3) Consider a single video source transmitting 20 frames/second to a certain receiver. Each frame contains 2MB of data. The jitter in the network is known to be 3 sec. What is the amount of buffer space required to compensate for the jitter?

1 point

- a. 30MB
- b. 40MB
- c. 60MB
- d. 100MB
- e. 120MB

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

e.

4) Which one of the following statement is TRUE concerning network traffic?

1 point

- a. CBR traffic is a special type of VBR traffic.
- b. VBR traffic is a special type of CBR traffic.
- c. Sporadic traffic is a special type of VBR traffic.
- d. VBR traffic is a special type of Sporadic traffic.
- e. Sporadic traffic is a special type of CBR traffic.
- f. CBR traffic is a special type of Sporadic traffic.
- g. None of these

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.
- ☐ f.
- ☐ g.

No, the answer is incorrect.

Score: 0

Accepted Answers:

c.

5) Alarm avalanche is an example of which of the following traffics?

1 point

- a. CBR traffic
- b. VBR traffic
- c. Sporadic traffic
- d. None of these

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

c.

6) Which of the following are examples of CBR traffic?

1 point

- a. The periodic temperature data generated by the sensors in a blast furnace
- b. The fixed sized messages transmitted periodically over a network
- c. Alternation between transmission of fixed sized packets and an idle period
- d. Compressed audio signals generated from speech signals
- e. Alarm avalanche

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

a.

b.

7) Which of the following are not True concerning ring topology?

1 point

- a. Nodes are connected to the network using Multi-station Access Units (MSAU)
- b. Each node transmits in turn and for a pre-determined period of time
- c. Any break in the ring can bring the whole network down
- d. Ring is a poor fit to the linear topology of most assembly lines and similar applications
- e. Communication delay is inversely proportional to number of nodes in the network
- f. Packet transmission is highly unpredictable
- g. Bandwidth is shared on all links between devices

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.
- ☐ f.
- ☐ g.

No, the answer is incorrect.

Score: 0

Accepted Answers:

e.

f.

8) In 10Base2 Ethernet, 2 refers to which of the following?

1 point

- a. 2 m max cable length.
- b. 20 m max cable length.
- c. 200 m max cable length.
- d. 2000 m max cable length.
- e. None of these

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

c.

9) Which one of the following Ethernet versions is called Thick Ethernet?

1 point

- a. 10Base2
- b. 10Base5
- c. 10BaseT
- d. 10BaseF
- e. 100BaseT
- f. 1000BaseT

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.
- ☐ f.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b.

10) Which one of the following is not an advantage of hub?

1 point

- a. Multi-tier arrangement provides graceful degradation
- b. Extends maximum distance between node pairs
- c. Hubs detect typical problems such as excessive collisions on certain ports and disconnect them
- d. Cannot connect different Ethernet types

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

d.

11) In virtual time protocol, if the channel is busy, what does it indicate?

1 point

- a. It indicates that a lower priority message is being transmitted and it would need to wait until an idle period
- b. It indicates that a higher priority message is being transmitted and it would need to wait until an idle period
- c. It indicates that an equal priority message is being transmitted and it would need to wait until an idle period
- d. It indicates that an equal priority message is being transmitted and it should not wait till an idle period
- e. None of these

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b.

12) In IEEE 802.5 protocol, the minimum time required to complete transmission of a frame using IEEE 802.5 protocol is which of the following?

1 point

- a. $\max(F, \theta)$, where F is the frame transmission time and θ is the propagation time
- b. $\min(F, \theta)$, where F is the frame transmission time and θ is the propagation time
- c. $\text{average}(F, \theta)$, where F is the frame transmission time and θ is the propagation time
- d. $\text{square}(F, \theta)$, where F is the frame transmission time and θ is the propagation time
- e. $\text{sqrt}(F, \theta)$, where F is the frame transmission time and θ is the propagation time

- ☐ a.
- ☐ b.
- ☐ c.
- ☐ d.
- ☐ e.

No, the answer is incorrect.

Score: 0

Accepted Answers:

a.