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reviewer2@nptel.iitm.ac.in ▼

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Announcements

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Unit 9 - Week 8

Course outline

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- Quiz : Assignment-8
- Lecture 36 : Effect on High Layer - I
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- Lecture 38 : Effect on High Layer - III
- Lecture 39 : Satellite Navigation - I
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Assignment-8

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2017-10-18, 23:59 IST

5 points

1) If RTO fires after *cwnd* reached 64 KB, how long it will take to reach though 128 Kbytes/s? Assume: $RTT = 0.5$ sec, segment size = 0.5 KB.

- A. 32 sec
- B. 35 sec
- C. 3 sec
- D. 5 sec

No, the answer is incorrect.

Score: 0

Accepted Answers:

B. 35 sec

5 points

2) Find the duration of slow start without loss of any segments. The parameters spe are, $RTT = 0.5$ s, $ssthresh = 64$ KB and segment size is 0.5 KB.

- A. 2.5 milliseconds
- B. 3.5 seconds
- C. 2 seconds
- D. 3 milliseconds

No, the answer is incorrect.

Score: 0

Accepted Answers:

B. 3.5 seconds

5 points

3) In a satellite based data communication system using TCP, the header is used in

- A. TCP segment only
- B. IP segment only
- C. satellite MAC frame only
- D. all of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

D. all of these

5 points

4) Which of the following is(are) the characteristic(s) of the Transmission Control tocol

- A. Maintaining the source and delivery port address
- B. Reliability
- C. Flow control

- D. All of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

D. All of these

5)

For fixed window size, if the Round Trip Time (RTT) increases due to a satellite channel, the throughput will

- A. increase
 B. decrease
 C. remain unaltered
 D. throughput does not depend on RTT

No, the answer is incorrect.

Score: 0

Accepted Answers:

B. decrease

6)

A TCP connection is set with window size of 64 KB uses a satellite with one hop of 300 ms between sender and receiver stations. The maximum possible through

- A. 8.066 Mbps
 B. 0.8533 Mbps
 C. 8.066 Kbps
 D. 0.8533 Kbps

No, the answer is incorrect.

Score: 0

Accepted Answers:

B. 0.8533 Mbps

7)

In GNSS signal model given below, which parameter contains the satellite epoch

$$y_i(t) = \sqrt{2}C_i d_i(t) c_i(t) \cos(2\pi f_i t + \phi_i)$$

- A. ϕ
 B. C
 C. c
 D. d

No, the answer is incorrect.

Score: 0

Accepted Answers:

D. d

8)

If *ssthresh* is 128 Kbytes and segment size is 500 bytes, find how many RTT required for *cwnd* equal to *ssthresh* during the slow start phase.

- A. 32
 B. 16
 C. 4
 D. 8

No, the answer is incorrect.

Score: 0

Accepted Answers:

D. 8

9)

5 po



5 points

5 points

5 points

5 points

An observer at the geographical North Pole (0, 0, 6378 Km) has a GPS receiver at an instant of time, measures same delay of 0.17097528 sec from four GPS satellites. The four satellite coordinates at that instant of time are (0, 13280.5, 23002.5), (0, -13280.5, 23002.5), (13280.5, 0, 23002.5) and (-13280.5, 0, 23002.5) where all distances are in km. Determine the clock offset error in GPS receiver when the velocity of the light is 2.99792458×10^8 km/s.

- A. 0.10000 sec
- B. 0.92356 sec
- C. 0.01 msec
- D. 0.92356 msec

No, the answer is incorrect.

Score: 0

Accepted Answers:

A. 0.10000 sec

10)

5 points

Measured received signal from each GPS satellite contains Signal power, PRN identifying the satellite, Navigation data, measured code delay, transmit frequency with Doppler offset. For initial signal acquisition which two parameters are searched?

- A. Navigation data and PRN code
- B. PRN code and delay
- C. Code Delay and frequency
- D. none of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

C. Code Delay and frequency

You were allowed to submit this assignment only once.

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