## **Primeasia University**

a mission with a vision

## Department of Computer Science and Engineering (CSE)

Final Examination (Part-1), Summer Semester, 2020

Course No. : CSE 411 Full Marks: 15
Course Title: Computer Network Time: 30 mins

## Answer all the Questions. Figures in the right-hand margin indicate full marks.

- 1. Suppose, a postman has to post a letter from place A to B. The distance between this two places is 5km and the letter can be propagated at 100m/s. If the ratio of the distance and the speed is one eighth of the time the letter will take to transmit then what will be the transmission delay of that letter?
- 2. "Downloading a file through P2P is much faster than through a centralized client-server approach" Justify your opinion with appropriate circumstances.
- 3. Suppose, there are three host A, B and C. Assume, in Host B the web server runs on the port number 80 and this web server uses persistent connections. Host B is currently receiving requests from two other host A and C. Are all of the requests being sent through the same socket at Host B? If they are being passed through different sockets, do both of the sockets have port number 80? Explain your opinion.
- 4. "Root name servers provide the IP addresses of the TLD servers and TLD servers provide the IP addresses for authoritative DNS servers"- explain briefly.
- 5. We all know that data is transferred through network by whether circuit switching or packet switching. There are some fundamental differences between these two network core. Suppose two user A and B want to share a 4 Mbps link. Each requires 120kbps when transmitting the data, but each user transmits only 30 percent of the time. In this scenario, if circuit switching is used, then can both A and B supported at the same time? Explain briefly your opinion.

- 6. Determine whether the following statements are True/False, if False give the correct statement:

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- a) DNS creates TCP connection with normal server and UDP connection with root server.
- b) In in-band two separate connections are used for data and control.
- c) DE capsulation is started from frame and ended at message.