

Primeasia University

a mission with a vision

Department of Computer Science and Engineering (CSE)

Final Examination (Part-2) Fall Semester, 2020

Course No. : CSE 411

Full Marks: 25

Course Title: Computer Network

Time: 60 mins

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

1. Obtaining the message is a pull operation, whereas SMTP is a push protocol, so which mail access protocol is generally used in web based mail system, Explain. 3
2. Suppose, there are two users A and B. A wants to send datagram to B and they both reside in different network which is connected through a router R. A knows the MAC address of B but does not know the IP address. In this situation how they can communicate? Explain with appropriate example. 3
3. “The hidden terminal actually degrade the throughput of wireless networks due to collisions and the exposed terminal actually wastes valuable transmission opportunities”- Explain. 2
4. We all know that, RTT means time for a small packet to travel from client to server and back. Suppose, a user request a web page consisting of two documents and three images. The total file size is 2 Kbyte (including document and images), download rate is 2 Mbps and RTT is 250ms. If HTTP uses the non-persistent connection, then what will be the response time of that file? 4
5. It is often desirable for a web site to identify users, either because the server wishes to restrict user access or because it wants to serve content as a function of the user identity. Suppose Susan, who always accesses the web using Google chrome from her PC, contacts Amazon.com for the first time, then how Amazon handle the whole situation in this case? Explain. 3
6. “OSI is the logical model not the physical model”-Explain. Why this model is used? 2

7. Suppose, Host A and B are connected through the communication link. At time t_0 , A wants to send frame to B and at time t_1 , B wants to send frame to A and at time t_2 collision occurred. There are two possible way to solve these problems- one is CDMA/CA and another is slotted ALOHA. Which one is the best solution for this phenomena? Explain your opinion clearly. 3

8. MCQ: 5

a) Port no 21 is used by_____

- i) FTP
- ii) SMTP
- iii) NTP
- iv) DNS

b) Routed protocol is applied in-

- i) Application Layer
- ii) Network Layer
- iii) Data Link Layer
- iv) Physical Layer

c) 48 bits can be used for-

- i) MAC Address
- ii) Jam Signal
- iii) Both 1 & 2
- iv) Only 1

d) In HTTP, if the server is crashed then the shown code will be-

- i) 400
- ii) 404
- iii) 500
- iv) 503

e) _____ is stateless.

- i) POP3
- ii) IMAP

