

Premier University
Department of Computer Science & Engineering
6th Semester, Mid Term, Spring 2024

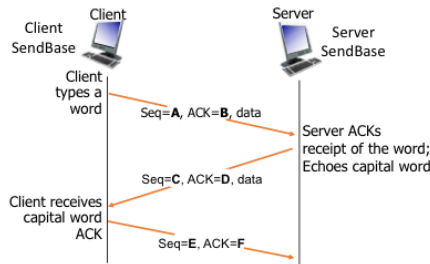
Course Code: CSE 367 Course Title: Computer Networks, CO: CO2

Total Marks: 20

Answer any two question sets

Time: 45 mins.

- 1(a) In the simple TCP client/server socket programming experiment, the client sends a word 'netfun' (total 7 bytes, including carriage return), and the server echoes with 'NETFUN' (7bytes), as shown in the figure below. Assume the client has a SendBase of 100, and the server has a SendBase of 30. 5



Calculate the Seq and Ack numbers A-F for the above figure and fill in the table below:

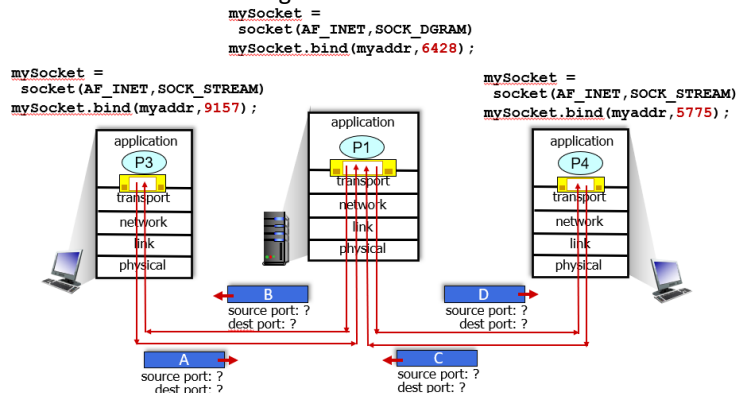
	Seq A	Ack B	Seq C	Ack D	Seq E	Ack F
Seq / Ack number	100					

- 1(b) Write short notes TCP 3-way handshake and AIMD 5

- 2(a) Differentiate between TCP flow control and congestion control. 3

- 2(b) What happens if the TCP timeout is too long or too short? 3

- 2(c) 4



Using the knowledge of connection-less multiplexing and demultiplexing find the source and destination port numbers. Complete the source and destination port numbers for

	Source Port	Destination Port
Segment from the server to Host C:		
Segment from Host C to the server:		
Segment from the server to Host A:		
Segment from Host A to the server:		

- 3(a) Write short notes on TCP fast retransmit and TCP slow start 4

- 3(b) Suppose that TCP's current estimatedRTT and DevRTT are 240 msec and 23 msec, respectively. Suppose that the next measured RTT is 300 msec. Find DevRTT, estimatedRTT, and the TCP timeout after the first timeout? Use $\alpha = 0.125$, and $\beta = 0.25$. 6