Notation (T: Textbook, J: Job Interview question (based on google search with keywords network job interview questions))

Review Class 1:

Part 1: Introduction

Chapter 1

T- R13.

T- R18.

T- R22 (J: ISO 7-layer model is asked often even if in practice people only adopt 5 layers as introduced in this class).

T- R 25.

T- P. 25 (J: This is called bandwidth * delay product. The practical meaning of this metric: the capacity of a pipe).

J: What is a protocol?

A protocol is a set of rules that govern all aspects of information communication between communication peers.

J: What is SAP?

J: What is connection-oriented Service? What is connectionless service?

In connection oriented service we have to establish a connection before starting the communication. When connection is established we send the message or the information and then we release the connection.

In connectionless service, we do not need to establish a connection before starting the communication. It is similar to the postal services, as it carries the full address where the message (letter) is to be carried.

Part 2: Application Layer

Chapter 2

T-R3

T-R4

T- R6

T- P1

T-P3

T-P4 (Similar J question)

T-P5 (Similar J question)

T- P20 (Similar J question)

T-P21 (Similar J question)

J- What is a DNS? What is the difference between recursive queries and iterative queries in DNS?

Review Class 2:

Part 3: Transport Layer

Chapter 3

T-R4

T- R6

T-R7

T-R8

T-R14

T-R15

T-R18 (Similar J question)

T-P27 (Similar J question)

T-P28

T-P40 (Similar J question)

J: What is the difference between TCP flow control and congestion control?

Part 4: Network Layer

Chapters 4

T-R17 (Similar J question)

T-R20

T-R26

T-P11 (Similar J question)

T-P17

T-P18

J- What is ARP? Why do we need ARP?

J- What is NAT? Explain the steps when NAT forward an outgoing/incoming datagram.

Chapter 5:

T-P16

T- P17.

Review Class 3:

Part 5: MAC Sublayer

Chapter 6

T-R2

T-R3

T-R12

Examples of calculating frame rate, minimum frame length in CSMA/CD

Chapter 7:

T-R1

T-R8

T-P8