

Portions for Term 1 Exams scheduled from 15-Sep-2021

19CSE301-Computer Networks

Term 1 Exam Portions

Chapter	Topic	Additional Info/Portions
		<b>Book :</b> <b>Computer Networking</b> <b>"A Top Down Approach "</b> <b>Seventh Edition</b> <b>Kurose,Ross</b>
1	1.1 What Is the Internet? 1.1.1 A Nuts-and-Bolts Description 1.1.2 A Services Description 1.1.3 What Is a Protocol? 1.2 The Network Edge 1.2.1 Access Networks 1.2.2 Physical Media 1.3 The Network Core 1.3.1 Packet Switching 1.3.2 Circuit Switching 1.3.3 A Network of Networks 1.4 Delay, Loss, and Throughput in Packet-Switched Networks 1.4.1 Overview of Delay in Packet-Switched Networks 1.4.2 Queuing Delay and Packet Loss 1.4.3 End-to-End Delay 1.4.4 Throughput in Computer Networks 1.5 Protocol Layers and Their Service Models 1.5.1 Layered Architecture 1.5.2 Encapsulation	<b>Problems :</b>  Mapping Layered Models to real use cases like railway ticket booking (similar to Baggage check in Book)  Packet and Circuit Switching  Delay, Loss and Throughput
2	2.1 Principles of Network Applications 2.1.1 Network Application Architectures 2.1.2 Processes Communicating 2.1.3 Transport Services Available to Applications 2.1.4 Transport Services Provided by the Internet	<b>Problems:</b>  HTTP Request and Response format  DNS

	<p>2.1.5 Application-Layer Protocols</p> <p>2.1.6 Network Applications Covered in This Book</p> <p>2.2 The Web and HTTP</p> <p>2.2.1 Overview of HTTP</p> <p>2.2.2 Non-Persistent and Persistent Connections</p> <p>2.2.3 HTTP Message Format</p> <p>2.2.4 User-Server Interaction: Cookies</p> <p>2.2.5 Web Caching</p> <p>2.3 Electronic Mail in the Internet</p> <p>2.3.1 SMTP</p> <p>2.3.2 Comparison with HTTP</p> <p>2.3.3 Mail Message Formats</p> <p>2.3.4 Mail Access Protocols</p> <p>2.4 DNS—The Internet’s Directory Service</p> <p>2.4.1 Services Provided by DNS</p> <p>2.4.2 Overview of How DNS Works</p> <p>2.4.3 DNS Records and Messages</p>	
3	<p>3.1 Introduction and Transport-Layer Services</p> <p>3.1.1 Relationship Between Transport and Network Layers</p> <p>3.1.2 Overview of the Transport Layer in the Internet</p> <p>3.2 Multiplexing and Demultiplexing</p> <p>3.3 Connectionless Transport: UDP</p> <p>3.3.1 UDP Segment Structure</p> <p>3.3.2 UDP Checksum</p>	<p><b>Problems :</b></p> <p>UDP</p>