# Sessional II Content

# SMTP

# POP3

# IMAP

# Web Email

# Domain Name System (Iterative and Recursive Query )

# Peer to Peer file distribution (Transmission time in peer to peer and client server network)

# Bit Torrent

# Transport Layer an overview, how it works? How is it related to network layer?

# TCP header

# UDP header

# Principles of reliable data transfer

# Rdt 1.0, Rdt 2.0, Rdt 3.0

# Stop and wait protocol

# Go back -N

# Selective repeat

# Congestion control in transport layer

# Congestion control techniques at transport layer

# Additive increase multiplicative decrease and slow start

# Network Layer

# Functions of network layer

# IPv4 header

# Fragmentation (offset and MF flag)

# Header length in IPv4 header

# Virtual circuit

# IP Addressee

# Classes of IP addresses

# Subnetting

# Subnet masking

# Numerical Questions will be from the following topics:

Major part of the paper will be from the following topics. For the reaming topics, you just need to know what they are

* Transmission time in client server and peer to peer model
* Iterative and selective query in DNS
* Stop and wait protocols
* TCP header and IPv4 header
* Go back N and selective repeat
* Additive increase and multiplicative decrease
* Fragmentation
* Subnetting and IP Classes
* Subnet masking
* You can check the following play lists for these topics:

<https://www.youtube.com/watch?v=7NFJGH4PzAs&list=PLmXKhU9FNesSjFbXSZGF8JF_4LVwwofCd>

<https://www.youtube.com/watch?v=4D55Cmj2t-A>

<https://www.youtube.com/watch?v=VwN91x5i25g>