Module 1

Signals --- S.Haykin and B. V. Veen, *Signals and Systems*,

Module 2

Communication Systems, Basic problems in Signal Transmission - Noise – Types of Noise- Internal and External Noise, Cross Talk-  Typical parameters of Communication Systems --- George Kennedy, Bernard Davis - *Electronic Communication Systems*

 Typical parameters of Communication Systems -- Mailed already

Communication Channels,Capacity of a Noisy Channel --- Behrouz Forouzan- *Data Communication and Networking and*William Stallings-*Data and Computer Communications*

Module 3

Modulation- Need for Modulation, Analog Modulation --- George Kennedy, Bernard Davis - *Electronic Communication Systems,*William Stallings- *Data and Computer Communications.*

Pulse Modulation Schemes --- Sanjay Sharma *'Digital Communication*'

Digital modulation --- Behrouz Forouzan- *Data Communication and Networking,*William Stallings- *Data and Computer Communications*

Module 4

Multiplexing --- Behrouz Forouzan- *Data Communication and Networking,*William Stallings- *Data and Computer Communications*

Switching --- William Stallings- *Data and Computer Communications,*Taub and Schilling – *Principles of Communication Systems*

SONET --- Behrouz Forouzan- *Data Communication and Networking,*William Stallings- *Data and Computer Communications*

Datagrams and virtual Circuits --- Behrouz Forouzan- *Data Communication and Networking,*William Stallings- *Data and Computer Communications*

Serial and parallel Transmission ---  Behrouz Forouzan- *Data Communication and Networking*

Module 5

Error Correction and Detection --- Behrouz Forouzan- *Data Communication and Networking,*Taub and Schilling – *Principles of Communication Systems*

Different Character Codes --- George Kennedy, Bernard Davis - *Electronic Communication Systems,*Behrouz Forouzan- *Data Communication and Networking*