Lesson plan

Lect. No.	Portion to be covered
1	**Introduction**: Uses of Computer Networks: Business applications, Home applications, Mobile Users
2	Network Hardware: Broadcast network, Pont to point network, LAN, MAN, WAN, Wireless network, Home network
3	Network Software: Protocol Hierarchies, Design issues for the layers
4	Network Software(cont.): Connection oriented and connection less **services**, **Service** primitives, Relationship of services to protocols
5	Reference Models: OSI reference model
6	Reference Models(cont.): TCP/IP reference model, Comparison of OSI and TCP/IP reference model
7	Example Networks(1.5.1,1.5.3,1.5.4 in brief) and (1.5.2 in detail)
8	**Physical Layer** : The theoretical basis for Data communication
9	The theoretical basis for Data communication(cont.)
10	Guided **Transmission** media: Magnetic media, Twisted pair, Coaxial Cable,
11	Fiber Optics, Fiber optic network
12	Wireless Transmission: Electromagnetic spectrum, Infrared and millimetre waves
13	The public switched telephone network: Structure of the Telephone System
14	The public switched telephone network: The local loop: Modem, ADSL and wireless
15	Trunks and Multiplexing
16	Switching
17	**The Data Link Layer Design Issues**: Services provided to network lay

model

7	Example Networks(1.5.1,1.5.3,1.5.4 in brief) and (1.5.2 in detail)
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17	**The Data Link Layer Design Issues**: Services provided to network layer, Framing
17	Error correcting codes
18	Error detecting codes
19	Elementary data link protocols: An unrestricted simplex protocol, A simplex stop and wait protocol
20	Sliding window protocols: A one bit sliding window protocol
21	A protocol using go back N, A protocol using selective repeat
22	Medium Access Control Sub layer : Channel allocation problem
23	Multiple Access protocols: ALOHA
24	Carrier sense multiple access protocol
25	Wireless LAN protocol
26	Ethernet : Ethernet performance, Switched Ethernet
27	Fast ethernet, Gigabit ethernet