

## INTERNET & WEB TECHNOLOGY – I

Lecture 1	<b>Internet Overview, Evolution of Internet</b>
Lecture 2	Internet component – Types of network
Lecture 3	Internet component- Network Hardware
Lecture 4	Internet component- Network Software
Lecture 5	Packet Switching Fundamentals and Circuit Switching, Efficiency
Lecture 6	Packet Switching : Datagram Switched Network
Lecture 7	Packet Switching : Virtual Circuit-switched Network
Lecture 8	Packet Switching : Virtual Circuit-switched Network, Efficiency
Lecture 9	Packet Switching versus CircuitSwitching,Internet Standards
Lecture 10	Internet Standards : IETF, ITU IEEE, ATM Forum
Lecture 11	Internet Protocol : IP format
Lecture 12	Internet Protocol: IP Addressing
Lecture 13	Subnet and Subnet Mask
Lecture 14	Class-less Address, Supernetting
Lecture 15	IPv6 Datagram Format , IPv4 vs IPv6
Lecture 16	TCP Fundamentals: TCP 3 way Hand shaking
Lecture 17	TCP/IP: routing.
Lecture 18	Networking protocols: Network Protocol Overview: Networking protocols in TCP/IP
Lecture 19	Networking protocols in TCP/IP –ARP,RARP,BGP,EGP
Lecture 20	NAT, DHCP

Lecture 21	Access Methods and Internet working, Access Network Architectures
Lecture 22	Access network characteristics, Differences between Access Networks, Local Area Networks and Wide Area Networks.
Lecture 23	Access Technologies
Lecture 24	Voice grade modems, ADSL
Lecture 25	Cable Modems, Frame Relay.
Lecture 26	DNS: Domain Names. Resolving Domain Names to IP addresses (DNS operation )
Lecture 27	Registering Domain Names and solving Domain name disputes.
Lecture 28	Routing: How the key IP routing protocols (OSPF)
Lecture 29	Routing: How the key IP routing protocols (BGP4)
Lecture 30	Implications of future Internet growth on routing protocol performance.
Lecture 31	Internet applications: FTP
Lecture 32	.FTP implimentation
Lecture 33	Internet applications: Telnet, Email, Chat
Lecture 34	World Wide Web: HTTP protocol.
Lecture 35	HTTP protocol Implementation and issues
Lecture 36	Search Engines. E-Commerce and security
Lecture37	Security : symmetric and asymmetric key
Lecture 38	Encryption and digital signature, and authentication
Lecture 39	Emerging trends, Internet telephony, virtual reality over the web, etc. Intranet and extranet, firewall.
Lecture 40	Emerging trends, Internet telephony, virtual reality over the web, etc. Intranet and extranet, firewall.