Lesson Plan

Name Of Faculty **: Promila**

Discipline **: Computer Engg.**

Semester **: Vth**

Subject **:Computer Network**

Work Load (Lecture / Practical) per week (In hours): Lecture-3, Practical-3)

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| Week | Theory | | Practical | |
| **Lecture Day** | **Topic ( Including Assignment / Test )** | **Practical Day** | **Topic** |
| 1 | 1 | Models of network computing,Networking Models | 1 | Recognize the physical topology and cabling (coaxial, OFC, UTP, STP) of a network |
| 2 | Peer to peer network,Server Client Network,Network Services |
| 3 | Concept of switching,Switching Techniques |
| 2 | 1 | Assignment And Revision | 2 | Recognition and use of various types of connectors RJ-45, RJ- 11,BNC |
| 2 | OSI Reference Model |
| 3 | Function of various layers in OSI Reference Model |
| 3 | 1 | Function of various layers in OSI Reference Model | 3 | Recognition of network devices (Switches, Hub, Routers of access points for Wi-Fi |
| 2 | Function of various layers in OSI Reference Model |
| 3 | Function of various layers in OSI Reference Model |
| 4 | 1 | Function of various layers in OSI Reference Model | 4 | Making of cross cable and straight cable |
| 2 | Assignment And Revision |
| 3 | Concept of physical and logical addressing |
| 5 | 1 | IPV4 addressers- Address space, Notations, Classful Addressing, Classl | 5 | Viva Voice |
| 2 | Classless Addressing, Network Address Translation. |
| 3 | Different classes of IP addressing, special IP address |
| 6 | 1 | Sub netting and super netting,Loop Back concept | 6 | Study and Demonstration of sub netting of IP address |
| 2 | Sub netting and super netting,Loop Back concept |
| 3 | IPV4 and IPV6 packet Format |
| 7 | 1 | IPV4 and IPV6 packet Format | 7 | Study and Demonstration of sub netting of IP address |
| 2 | Assignment And Revision |
| 3 | Test 1 |
| 8 | 1 | Ethernet Specification and Standardization | 8 | Identify the IP address of a workstation and the class of  the address and configure the |
| 2 | 10 Mbps (Traditional Ethernet), 10 Mbps (Fast Ethernet) |
| 3 | 10 Mbps (Traditional Ethernet), 10 Mbps (Fast Ethernet) |
| 9 | 1 | 1000 Mbps (Gigabit Ethernet) | 9 | Identify the IP address of a  workstation and the class of the address and configure the |
| 2 | Introduction to Media Connectivity (Leased lines, ISDN, PSTN |
| 3 | RF, DSL, VSAT, Optical and IPLC) |
| 10 | 1 | Introduction to Media Connectivity (Leased lines, ISDN, PSTN | 10 | Install and configure a  network interface card in a workstation. |
| 2 | RF, DSL, VSAT, Optical and IPLC) |
| 3 | Assignment And Revision |
| 11 | 1 | Test 2 | 11 | Viva Voice |
| 2 | Network connectivity Devices:-NICs |
| 3 | Hubs, bridges,Repeaters, switches |
| 12 | 1 | Hubs, bridges,Repeaters, switches | 12 | Installation of Network Operating System(NOS) |
| 2 | Multiplexers,Modems |
| 3 | Routers,Gateways |
| 13 | 1 | Routers,Gateways | 13 | Installation of Network Operating System(NOS) |
| 2 | Assignment And Revision |
| 3 | Trouble Shooting process |
| 14 | 1 | Trouble Shooting Tools:PING,IPCONFIG | 14 | Use of Netstat and its options |
| 2 | IFCONFIG, NETSTAT, TRACEROOT |
| 3 | Wiresharp/ Dsniffer/ Pcop |
| 15 | 1 | IEEE 802.11:-Architecture, | 15 | Connectivity troubleshooting  using PING, IPCONFIG, IFCONFIG |
| 2 | IEEE 802.11:-Architecture, |
| 3 | Bluetooth- Architecture |
| 16 | 1 | Bluetooth- Architecture | 16 | Viva Voice |
| 2 | Assignment And Revision |
| 3 | Test 3 |