

JSS COLLEGE FOR WOMEN (AUTONOMOUS)
SARASWATHIPURAM, MYSORE-09

LESSON PLAN

Name of the Teacher: Kanaka B

Department: Computer Science

Academic year and Semester: 2021 – 22 IV Semester

Program: BCA


Class and Section: II BCA-A

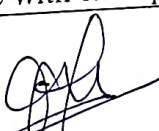
Course Name: Computer Networks


Course Code: **GRB230**

| Week | Topic to be covered |
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| 1 | Introduction to Data communication, Components & Basic Concepts Line Configuration: Point – to – Point, Multipoint. Topology: Mesh, Star, Tree, Bus, Ring, hybrid Topologies. |
| 2 | Define Transmission Modes and types: Simplex, Half-Duplex, Full-Duplex. Categories of Networks: LAN, MAN, WAN, Internet Works. |
| 3 | Introduction to transmission media and types Guided Media: Twisted pair cable, Co-axial Cable and Optical Fibre. Unguided Media : Radio Frequency Allocation and Propagation of Radio Waves , |
| 4 | Introduction to Terrestrial Microwaves , Satellite Communication , and Cellular Telephony |
| 5 | Define Multiplexing: Many to one / One to Many, Types of Multiplexing frequency -division Multiplexing, Time-division Multiplexing, Multiplexing applications Introduction Analog & Digital Signals Amplitude, Period & Phase, Use of Analog Signals to transmit digital data. |
| 6 | Introduction to Encoding Analog to Digital Encoding: Pulse Amplitude Modulation (PAM), Pulse Code Modulation (PCM) sampling rate. Digital to Analog Encoding amplitude shift key (ASK) , Frequency Shift key (FSK) , Phase Shift Key (FSK). |
| 7 | Introduction to Analog to Analog Encoding: Amplitude Modulation, Frequency Modulation, and Phase Modulation. |
| 8 | Introduction to Digital to Digital Encoding with diagram, Define Line coding and Block coding with diagram |
| 9 | Introduction to OSI Model : Model Layered Architecture Functions of Layers Physical Layer, Data |

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| | Link Layer, Network Layer, transport Layer, Session Layer, Presentation Layer, and Application Layer. With structure diagram |
| 10 | Overview of TCP/IP , TCP/IP & Internet , Difference between TCP/IP & OSI , Encapsulation , Network Layer , Internet work Protocol Other Protocols in the Network Layer , Transport Layer User Datagram Protocol (UDP) , Transmission Control Protocol (TCP) , |
| 11 | Define ICMP and IGMP, Application Layer , Domain Name system , Telnet , File Transfer Protocol (FTP) , File Transfer using NFS & RPC , Introduction to Electronic Mail : SMTP , Simple Network Management Protocol(SNMP), Define Archie and Veronica, |
| 12 | Define Wide area Information Service(WAIS), Introduction to Hyper Text Transport Protocol (HTTP) . Define World Wide Web (WWW) and Uniform Resource Labor (URL), Browser Architecture. |
| 13 | Introduction to Network & Internetworking devices , Define Repeaters, Bridges, Types of Bridges, Routers-Routing concepts, gateways. |
| 14 | Introduction to Error detection with Types of error, Multiple bit error and Burst error Detection with diagram. Define Redundancy , Checksum and Block coding |
| 15 | Error Correction Single-bit error correction , Define Hamming Code CRC IPv4 class full, Define classless addressing. Introduction to Structure of IPv4 and IPv6 structure, Introduction to address apace with examples. |


Teacher


HOD
HEAD
Department of Computer Science
JSS College for Women
(Autonomous)
Saraswathipuram, Mysore-19


Principal
PRINCIPAL
JSS COLLEGE FOR WOMEN
(Autonomous)
Saraswathipuram, MYSORE-9