ACADEMIC LESSION PLAN FOR SUMMER SEMESTER MARCH - 2022
Deptt. of Electronics & Telecommunication, Govt. Polytechnic , Balasore.
Name of the Faculty :   Er. Kaushik Murmu LECT.(CSE)
Network Communication

Course Code :	ETT-503	Teachers Assessment :	10 Marks
Theory :	4 P/W	Class Test :	20 Marks
Total Period s:	60 P/ Sem	End Semester Exam :	70marks
Examination :	3 Hours	TOTAL MARKS :	100 Marks
Sem :	4TH E&TC.	Start :	16th MARCH 2022

WEEK	PERIOD	TOPIC
1st	1st	**1. Network Components, Functions and Features**: 1.1 Define Networking& what is a network criterion.
	2nd	1.2 What are the Advantages of Networking?
	3rd	1.3 Explain Networking Models.(Server, Client)
	4th	1.4 Explain Transmission Media & Shared Data, Share Peripherals,
2nd	1st	1.5 Explain NIC &Card & its applications
	2nd	1.6 Explain Local Operating System, & Networking Operating System.
	3rd	**2. Network Topology & Classification:** 2.1 Define the Network Topology.
	4th	2.2 Describe various Network Topology(Star, Bus, Ring, Mesh.)
3rd	1st	2.3 State the different classification of Networks
	2nd	2.4 Explain the different Networks model. (LAN, WAN, MAN)
	3rd	2.5 Explain interconnection of Network.
	4th	**3. Data Communication Circuits:** **3.1** Explain different Data Communication Circuit.
4th	1st	3.1 Serial & Parallel Transmission.
	2nd	3.1 Synchronous& Asynchronous Transmission.
	3rd	3.1 Simplex, Half Duplex
	4th	3.1 Full Duplex.
5th	1st	**4. Switching:** 4.1 Define Switching.
	2nd	4.2 Explain the Features of circuit switching
	3rd	4.3 packet switching, Data gram approach
	4th	4.2 Virtual circuit approach and its comparison
6th	1st	4.3 Explain the features of cell switching.
	2nd	**5. Protocols:** 5.1 Define Data Communication Protocols.
	3rd	5.2 Discuss the 7 layers of OSI model.
	4th	5.2 Discuss the 7 layers of OSI model.
7th	1st	5.2 Discuss the 7 layers of OSI model.
	2nd	5.3 Discuss the 7 layers of OSI model.

	3rd	**6. Local Area Network (LAN):** 6.1 Name different types of LAN Components
	4th	6.2 Explain Hardware & Software
8th	1st	6.3 Describe Transmission Channel.
	2nd	6.4 Explain Network Interface Card.
	3rd	6.5 Explain briefly LAN operating system.
	4th	6.6 Describe Wireless LAN.
9th	1st	**7. Network Elements:** 7.1 Explain the following terms – Hub, Bridge
	2nd	7.1 Router
	3rd	7.1 Gateway Modem
	4th	7.1 Dial in Remote Access.
10th	1st	**8. Internet:** 8.1 Explain Internet Protocols, TCP/IP: IP address and its Format,
	2nd	8.1 TCP/IP Based Package and its standards.
	3rd	8.2 Explain World Wide Web(WWW), WWW Browsers,
	4th	8.2 Servers, HTTP Universal Recourses Locator (URL).
11th	1st	8.2 Search Engines and Hypertext.
	2nd	8.3 Define Browser. Customisation of browser, Saving
	3rd	8.3 Printing of Web page, internet Explorer.
	4th	8.4 Explain Types of Internet Connection and common name structure of three security protocols.
12th	1st	8.4.1 Discuss the type of Internet Connection (Dial Up, SLIP, DSL (ADSL & SDSL),
	2nd	8.4.1 Direct Connection(Leased Connection, Satellite Connection)
	3rd	8.4.2 Discuss X.25 technology, Frame Relay & its application
	4th	8.5 Concept Wireless Technology, Bluetooth Technology, WiMax, WiFi, Technology
13th	1st	**9. Wireless Communication: Cell Phone :** 9.1 Explain the concept of frequency reuse channel assignment strategic handoff co-channel Interference
	2nd	9.1 System capacity of a Cellular Radio systems.
	3rd	9.2 Define Cell &Explain the improving coverage and capacity in cellular system (Cell Splitting, Sectoring)
	4th	9.3 Explain Wireless Systems and its Standards.
14th	1st	9.4 Discuss the GSM (Global System for Mobile) service and features. 9.5 Discuss the architecture of GSM system & GSM mobile station.
	2nd	9.6 Discuss radio sub system and channel types of GSM system. 9.7 Discuss the frequency and channel specifications of CDMA system.
	3rd	9.8 Explain the working of forward and reveres CDMA channel 9.9 Discuss the architecture and features of GPRS.
	4th	9.10 Discuss the mobile TCP, IP protocol. 9.11 Discuss the operation of Wireless Application Protocol (WAP).
15th	1st	9.12 Discuss the architecture and features of SMS. 9.13 Discuss the architecture and features of MMS.
	2nd	9.14Discuss the features of EDGE & UMTS system.
	3rd	9.15 Discuss the features of 2G, 2.5G, 3G & 4G Wireless network.
	4th	9.16 What is Smart Phone and discuss its features.