KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN Session (2022-2023)

| Discipline: Electronics | Semester: 4 th , S/2023 | Name of the faculty: Amalendu |
|--------------------------------|---|----------------------------------|
| & Telecommunication | | kumar Pradhan |
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| Subject: Data | No. of Days/week: 04 | Start Date: 13/02/2023 |
| Communication & | | End Date: 23/05/2023 |
| Computer Network, | | |
| (Th.2) | | |

| Week | Class Day | Theory Topics | |
|-----------------|-----------------|---|--|
| 1 st | 1 st | 1. Introduction to Network & Protocol | |
| | 2 nd | Data Communication | |
| | 3 rd | Networks | |
| | 4 th | Protocol & Architecture, Standards | |
| 2 nd | 1 st | OSI model | |
| | 2 nd | TCP/IP | |
| | 3 rd | 2. Introduction to Data Transmission & Media | |
| | 4 th | Data transmission Concepts and Terminology | |
| 3^{rd} | 1 st | Analog and Digital Data transmission | |
| | 2 nd | Transmission impairments, Channel capacity | |
| | 3 rd | Transmission media | |
| | 4 th | Guided Transmission | |
| 4 th | 1 st | Wireless Transmission | |
| | 2 nd | Revision | |
| | 3 rd | 3. Introduction to Data Encoding | |
| | 4 th | Data encoding, | |
| 5 th | 1 st | Digital data digital signals, | |
| | 2 nd | Digital data analog signals | |
| | 3 rd | Analog data digital signals | |
| | 4 th | Analog data analog signals | |
| 6 th | 1 st | Quiz – 1 | |
| | 2 nd | 4. Introduction to Data Communication & Data link control | |
| | 3 rd | Asynchronous and Synchronous Transmission | |
| | 4 th | Error Detection | |
| $7^{\rm th}$ | 1 st | Line configuration | |
| | 2 nd | Flow Control | |
| | 3 rd | Error Control | |
| | 4 th | Discussion about control system | |
| 8 th | 1 st | Multiplexing | |

| | 2 nd | Continuing Multiplexing | |
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| | 3 rd | FDM synchronous TDM | |
| | 4 th | Continuing FDM synchronous TDM | |
| 9 th | 1 st | Statistical TDM | |
| | 2 nd | Revision | |
| | 3^{rd} | 5. Introduction to Switching & Routing | |
| | 4 th | Circuit Switching networks | |
| 10 th | 1 st | Packet Switching principles | |
| | 2 nd | X.25 | |
| | 3^{rd} | Routing in Packet switching | |
| | 4 th | Congestion | |
| 11 th | 1 st | Effects of congestion | |
| | 2 nd | congestion control | |
| | 3^{rd} | Traffic Management | |
| | 4^{th} | Congestion Control in Packet Switching Network. | |
| 12 th | 1 st | Revision | |
| | 2^{nd} | 6. Introduction to LAN Technology | |
| | 3^{rd} | Topology and Transmission Media | |
| | 4^{th} | LAN protocol architecture | |
| 13 th | 1 st | Medium Access control | |
| | 2^{nd} | Bridges, Hub, Switch | |
| | 3^{rd} | Ethernet (CSMA/CD), Fiber Channel | |
| | 4^{th} | Wireless LAN Technology. | |
| 14 th | 1 st | Revision | |
| | 2^{nd} | Quiz - 2 | |
| | 3 rd | 7. Introduction to TCP/IP | |
| | 4^{th} | TCP/IP Protocol Suite | |
| 15 th | 1 st | Basic Protocol functions | |
| | 2^{nd} | Principles of Internetworking | |
| | $3^{\rm rd}$ | Internet Protocol operations | |
| | 4^{th} | Internet Protocol | |