# 20CS21P2 - COMPUTER NETWORKS LABORATORY

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| Course Category: | Program Core | Credits: | 1.5 |
| Course Type: | Practical | Lecture-Tutorial-Practical: | 0-0-3 |
| Prerequisite: | Knowledge in Computer Fundamentals and basic Network essentials. | Sessional Evaluation:Univ. Exam Evaluation:Total Marks: | 4060100 |
| Objectives: | * To learn and practice the essentials of computer network layers, protocols and supporting applications.
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| Course Outcomes | At the end of this lab session, the students will be able to understand the basics of computer Network layers and analyse some of the protocols & application. |
| Course Content | 1. Study of different types of Network cables and implement the Cross-Wired Cable and Straight through Cable using Clamping tool.
2. Study Network Devices and its basic network commands in Detail.
3. Study of Network IPV4 addressing and Sub-Netting.
4. Create Web Pages.
5. Analyse Distance Vector Routing.
6. Analyse Link State Vector Routing.
7. Analyse Error Detection Mechanism.
8. Analyse Error Correction Mechanism.
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| Text Books &ReferencesBooks | **REFERENCE BOOKS:**1. Computer Networking: A Top-Down Approach, James F. Kurose, K. W. Ross, 6th Edition, Pearson Education.
2. Computer Networks - Andrew S Tanenbaum, 4th Edition, Pearson Education
3. HTML, XHTML and CSS Bible by Steven M. Schafer, 5th Edition, Wiley Publications
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| E-Resources | 1. <https://www.wireshark.org/>
2. <https://bayanbox.ir/view/3697480237749666667/Introduction-to-Network-Simulator-NS2-2012.pdf>
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**CO-PO Mapping:** 3-High Mapping, 2-Moderate Mapping, 1-Low Mapping, - -Not Mapping

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|   | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| **CO1** | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 |