17CS22P2- COMPUTER NETWORKS LAB

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| **Course Category:** | Core | **Credits:** | 2 |
| **Course Type:** | Laboratory | **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 simulate some of the protocols & application |
| **Course Content** | 1. Create Sample Wired Network Using NS-2 Simulator
2. Create Routing Algorithms and Analyze them by using NS-2 Simulator
3. Create TCP Connection Between two Nodes and find Through put of it using NS-2 Simulator
4. Create UDP Connection Between two Nodes and find Through put of it using NS-2 Simulator
5. Create WebPages
6. Write a java Program for Framing techniques
7. Write a java Program for Error Detection Mechanism
8. Write a java Program for Error Correction Mechanism
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| **Text Books and References:** | **Reference Books:**1. Computer Networks - Andrew S Tanenbaum, 4th Edition, Pearson Education
2. [Introduction to Network Simulator NS2](http://www.springer.com/in/book/9780387717593) by Teerawat Issariyakul, Ekram Hossain, 2nd Edition, Springer
3. Java™ : The Complete Reference by Herbert Schildt, Seventh Edition
4. HTML, XHTML and CSS Bible by Steven M. Schafer, 5th Edition, Wiley Publications
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| **E-Resources** | 1. [**https://google.com**](https://google.com)
2. [**http://iiti.ac.in/people/~tanimad/JavaTheCompleteReference.pdf**](http://iiti.ac.in/people/~tanimad/JavaTheCompleteReference.pdf)
3. [**https://bayanbox.ir/view/3697480237749666667/Introduction-to-Network-Simulator-NS2-2012.pdf**](https://bayanbox.ir/view/3697480237749666667/Introduction-to-Network-Simulator-NS2-2012.pdf)
4. **ftp://ftp.micronet-rostov.ru/linux-support/books/programming/HTML-CSS/[Wiley]%20%20HTML,%20XHTML,%20and%20CSS%20Bible,%205th%20ed.%20-%20[Steven%20M.%20Schafer].pdf**
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