



POORNIMA UNIVERSITY

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Member of Association of Indian Universities & Approved by UGC (Govt. of India) under 2(f) & 12(B)

Faculty of Engineering and Technology Faculty of Computer Science and Engineering Department of First Year

Synopsis on “<Computer Networking>” for Project

Topic of the Project: Introduction to Computer Networking

Objective :

1. **Learn Basics:** Grasp core networking principles and protocols.
2. **Practical Setup:** Implement and configure a basic local area network (LAN)
3. **Use Tools:** Gain familiarity with essential networking tools and software.

Scope:

1. **Network Design:** Create a basic network layout and configure devices.
2. **Configuration:** Set up IP addressing and basic network devices.

Process Description: • **Network Design and Setup:** Create a network layout, configure devices such as routers and switches, and assign IP addresses to establish a basic local area network (LAN).

• **Configuration and Testing:** Set up network services, test connectivity using tools like ping and traceroute, and troubleshoot any issues that arise during the setup.

• **Documentation and Security:** Document the network configuration and troubleshooting steps, and implement basic security measures like firewalls to safeguard the network

Resources: Access to networking hardware (routers, switches) or simulation tools (Cisco Packet Tracer), and networking textbooks or online guides for reference.

Limitations: Limited by the complexity of the network setup due to time constraints and possible lack of advanced hardware or software for in-depth testing and security implementation.

Conclusion: This project provides a foundational understanding of computer networking by designing, configuring, and testing a basic local area network. Through practical application and troubleshooting, students gain essential skills in network setup and maintenance, while also learning to document their processes and implement basic security measures..

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Year \ Semester: 1st year , sem-1

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Approval of Synopsis (By HOD)

Guideline for Synopsis Formation:

Synopsis, preferably, should be of about 3-4 pages. The content should be as brief as is sufficient enough to explain the objective and implementation of the project that the candidate is going to take up. The write up must adhere to the guidelines and should include the following (not necessarily in order as given below).

1. Name / Title of the Project
2. Statement about the Problem
3. Why is the particular topic chosen?
4. Objective and scope of the project
5. Methodology (including a summary of the project)
6. Hardware & Software to be used
7. Testing Technologies used
8. What contribution would the project make?
9. His / her willingness to guide.