

USMAN Institute of Technology

Department	Engineering Technology
Course-Code	CET225
Course-Name	Operating Systems
Submission Deadline	30-12-2024
Total Marks	5

Assignment#03

General Instructions:

- Your work should be original, not copied from internet or any other resource
 - You can discuss with class fellows and research from internet but do not copy paste.
 - Assignment should be submitted before due date.
 - First Page your Assignment must be Title page, with Assignment No. Student Id and Full Name
 - Submit hand written assignment.
 - Answer all questions clearly and concisely. Diagrams and examples are encouraged where applicable.
1. Define a **Distributed System** and explain the key features that distinguish it from a centralized system.
 2. Describe **three common architectural models** used in distributed systems. For each model, draw a diagram and discuss its advantages and disadvantages with an example (e.g., Client-Server, Peer-to-Peer, and Hybrid).
 3. What is a **Network Operating System (NOS)**? Briefly explain its purpose. Draw an architecture of Network operating system.
 4. Name any **three examples** of Network Operating Systems and mention their key features.
 5. Differentiate between a **Network Operating System (NOS)** and a **Distributed Operating System**.
 6. Explain the role of **user authentication** and **resource sharing** in a NOS.
 7. Discuss **five key features** of a Network Operating System (e.g., file sharing, security, remote access).
 8. Explain the challenges or disadvantages faced while implementing and managing a NOS.