

Program Report- Guest Lecture on Operating Systems

1	Name of the Activity/Event	Guest Lecture on Principles of Operating Systems		
2	Date of Activity/Event	21/07/2023		
3	Organized by/Name of the committee	Narayana Engineering College CSE Department		
4	Place of Activity/event	Sri Ramanujam Seminar Hall C Block		
5	Resource person/guest/organization	Dr.V.Jyotshna Assoc Professor & Associate Dean ept of Data Science Mohan Babu University Tirupati		
6	Type of activity/Event	Guest Lecture		
7	Activity/Event objectives	1. Operating systems and its wide applications 2. Important concepts of Operating systems are discussed 3. Prominence of Deadlocks ,Semaphores, Monitors etc., are discussed in this Guest Lecture		
8	Participation	Students	Faculty	Total Participation
		198	5	203
9	Suggested Improvements	Need some more sessions practical environment is suggested .		
10	Enclosures	Event Photos		
11	Signature of Incharge/convener			

Department of CSE has conducted a Guest Lecture on Principles of Operating System on 21/07/2023. In this Guest Lecture the key concepts of operating systems like Semaphores, Monitors, Paging, Deadlocks, Mutual exclusive concepts are discussed.



Resource person

Guest lecture of the event has started by initiating the Resource person to the students later the session is carried out by discussing the principles of operating systems.

A library operating system is one in which the services that a typical operating system provides, such as networking, are provided in the form of libraries and composed with the application and configuration code to construct a unikernel: a specialized, single address space, machine image that can be deployed to cloud or embedded environments



Key Points Discussed:

- A single-tasking system can only run one program at a time, while a multi-tasking operating system allows more than one program to be running concurrently.
- This is achieved by time-sharing, where the available processor time is divided between multiple processes.
- These processes are each interrupted repeatedly in time slices by a task-scheduling subsystem of the operating system.
- Multi-tasking may be characterized in preemptive and cooperative types.
- In preemptive multitasking, the operating system slices the CPU time and dedicates a slot to each of the programs.
- Unix-like operating systems, such as Linux—as well as non-Unix-like, such as AmigaOS—support preemptive multitasking.
- Cooperative multitasking is achieved by relying on each process to provide time to the other processes in a defined manner.
- 16-bit versions of Microsoft Windows used cooperative multi-tasking; 32-bit versions of both Windows NT and Win9x used preemptive multi-tasking.