NARAYANA ENGINEERING COLLEGE
An Autonomous College under JNTUA, Approved by AICTE, New Delhi
Dhurjati Nagar, Gudur, Tirupati Dist., AP - 524101
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AI & ML)

Estd : 2001

REPORT ON GUEST LECTURE

Date: 19/09/2024

Title: Guest Lecture on Object-Oriented Programming through Java
Date: 17th to 18 th September 2024
Venue: CSE Seminar Hall
Audience: CSM II B.Tech Students
Speaker: Dr. B. Narendra Kumar Rao, Professor and Program Head (AI & ML), MBU

Introduction:

The Department of Computer Science and Engineering(AI & ML) organized a guest lecture on **Object-Oriented Programming through Java** for the **II B.Tech I Sem** students. The session was conducted by **Dr. B. Narendra Kumar Rao,** an esteemed professor and expert in **AI & ML.** The event was held in the CSE Seminar Hall on **17th October 2024.**

Objective of the Lecture:

The lecture aimed to provide students with in-depth knowledge of Module 2 of the curriculum, covering essential concepts related to classes and objects in Java.

Topics Covered:

Dr. B. Narendra Kumar Rao delivered a detailed session on the following topics:

1. **Classes and Objects:**
   o Introduction to Classes and Objects
   o Class Declaration and Modifiers
   o Class Members and Access Control
   o Declaration and Assignment of Class Objects
   o Accessing Private Members of a Class
   o Constructor Methods and Overloaded Constructors
   o Nested Classes and Final Classes & Methods
   o Passing Arguments by Value and Reference
   o Usage of the Keyword this

2. **Methods in Java:**
   o Introduction to Methods
   o Defining and Overloading Methods
   o Overloaded Constructor Methods
   o Class Objects as Parameters in Methods
   o Recursive Methods and Nesting of Methods
   o Method Overriding
   o Attributes: Final and Static

Key Takeaways:

- The lecture provided valuable insights into the fundamentals of Object-Oriented Programming.
- Real-world examples were discussed to enhance the understanding of concepts.
- Students gained clarity on key topics such as access control, method overloading, and constructors.
- Interactive Q&A session helped students clear their doubts effectively.

Conclusion:

The guest lecture was highly informative and engaging. **Dr. B. Narendra Kumar Rao** shared his expertise and enriched students' knowledge on Java programming. The session proved to be an excellent opportunity for students to strengthen their understanding of Object-Oriented Programming concepts. The Department of Computer Science and Engineering extends its gratitude to the speaker for his valuable contribution and to the students for their enthusiastic participation.

HOD-CSM