



KESHAV MEMORIAL INSTITUTE OF COMMERCE & SCIENCES

Affiliated to Osmania University, NAAC Accredited

Narayanaguda, Hyd

A Unit of Keshav Memorial Educational Society

Report on

Guest Lecture

Data Structures using C-Language (Concept of Trees, Different types of Trees, BST Traversal)

Session Details

Title of the session: Data Structures using C-Language (Concept of Trees, Different types of Trees, BST Traversal)

Date: 1/04/2026

Duration: 1 hour

Activity Category: IIC Calendar/MIC Driven/Self Driven/Celebration

Theme: To gain the knowledge Tree concept

Venue: B.Sc Computer Science Lab, KMICS

Organised by: Keshav Memorial Institute of Commerce and Sciences, Department of Computer Science

Expert/Speaker Details:

Name: Miss. K. Nandhini

Designation: Assistant Professor of Computer Science

Organization: Assistant Professor of Computer Science in Keshav Memorial Institute of Commerce & Sciences UG and PG.

Brief about Expert/Speaker: K. Nandhini, Assistant professor at KMICS, Hyderabad. She is Completed Masters in Computer Science in Aurora College, at Ramanthapur, Hyderabad.

Outcome/Report of the activity:

- To understand the concept of trees as a non-linear data structure
- To learn different types of trees used in computer science
- To implement tree structures using C programming
- To understand traversal techniques in Binary Search Trees

Key Highlights:

Applications of Trees

- File systems and directory structures
- Database indexing
- Expression evaluation
- Artificial Intelligence (decision trees)
- Networking (routing algorithms)

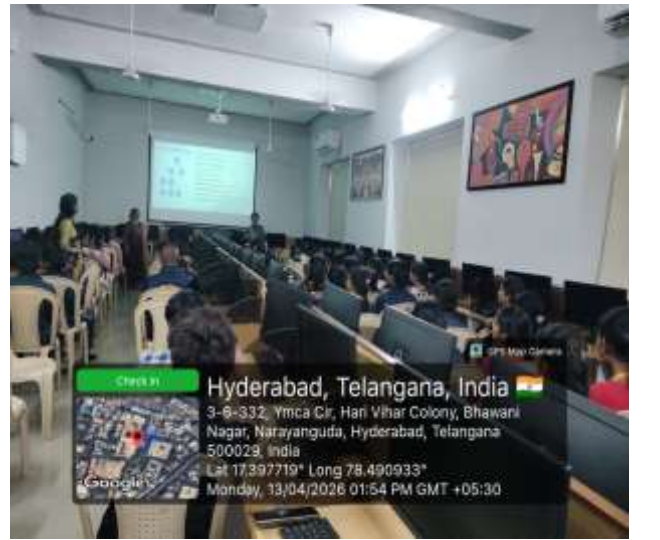
Terminologies of Trees

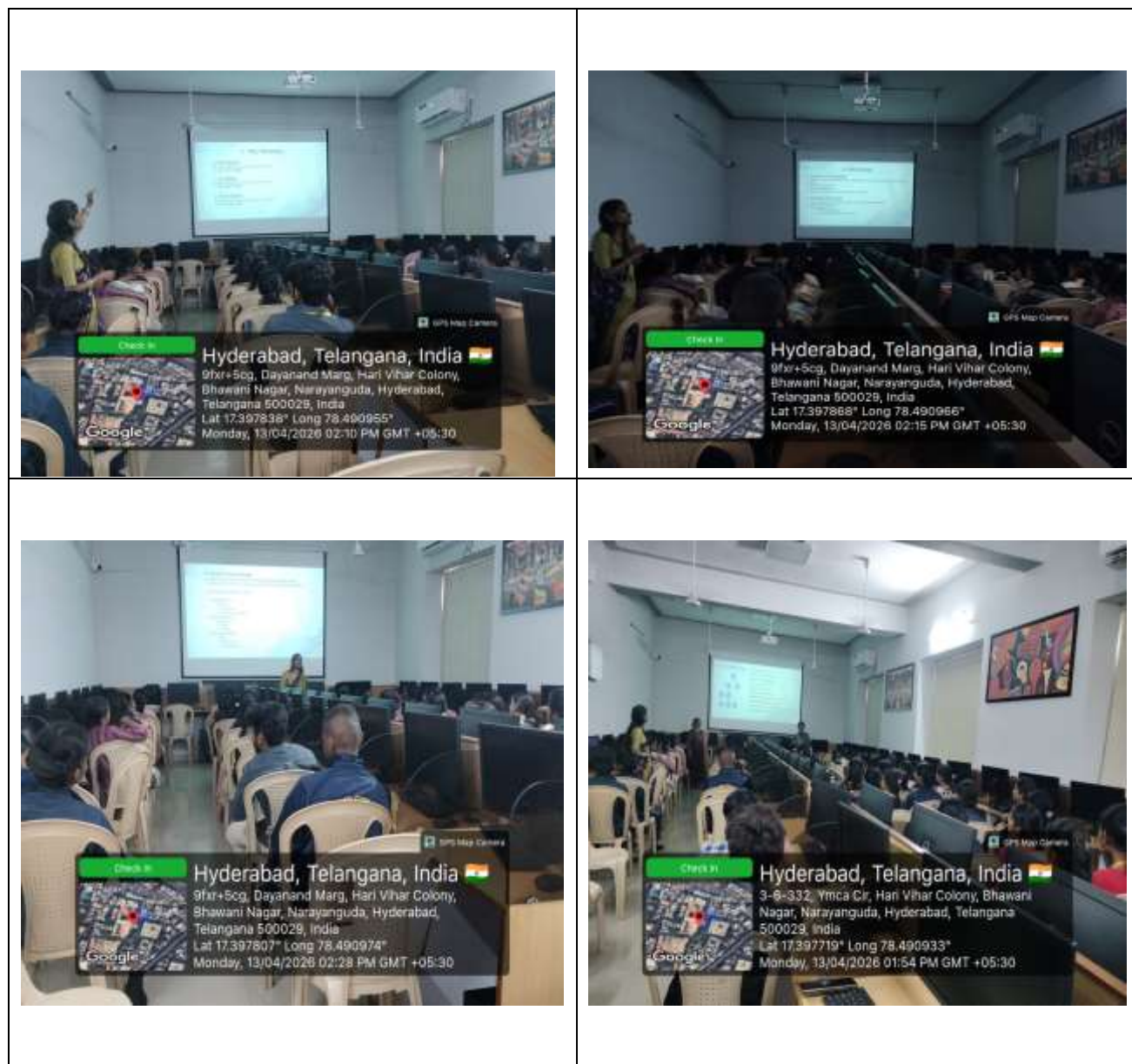
- **Node:** Basic element of a tree
- **Root:** Topmost node
- **Parent/Child:** Relationship between nodes
- **Leaf Node:** Node with no children
- **Subtree:** A tree within a tree
- **Height:** Maximum depth of a tree

Participant details:

Total no. of Student participation: **88**(BSc I Year (MPCs & MSCs))

Total no. of Staff (Teaching/Non-teaching) participation: **6**





- Attendance details /Participants List (photo)(Word format provided)

Class	Year	No. of Students
BSC(MPCs)	I Year	43
BSC(MSCs)	I Year	45

Conclusion

The guest lecture provided a comprehensive understanding of tree data structures and their implementation in C. Students gained knowledge about different types of trees and learned how traversal techniques work in Binary Search Trees. The session was highly informative and helped strengthen the conceptual and programming skills of the students.