

# **DATA STRUCTURE LAB**

**(20MCA135)**

## **LAB RECORD**

Submitted in partial fulfilment of the requirements for the award of the degree  
of Master of Computer Applications of A P J Abdul Kalam Technological  
University, Kerala.

**Submitted by:**

**SREYAS SATHEESH (SJC23MCA-2053)**



**MASTER OF COMPUTER APPLICATIONS**  
**ST. JOSEPH'S COLLEGE OF ENGINEERING AND**  
**TECHNOLOGY, PALAI**

**CHOONDACHERRY P.O, KOTTAYAM**

**KERALA**

**January 2024**

# **ST. JOSEPH' S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI**

**(An ISO 9001: 2015 Certified College)**

**CHOONDACHERRY P.O, KOTTAYAM, KERALA**



## **CERTIFICATE**

This is to certify that the Data Structure Lab Record (20MCA135) submitted by **Sreyas Satheesh**, student of **First** semester **MCA** at **ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI** in partial fulfilment for the award of Master of Computer Applications is a bonafide record of the lab work carried out by him under our guidance and supervision. This record in any form has not been submitted to any other University or Institute for any purpose.

**Mr. Anish Augustine K**  
**(Faculty In- Charge)**

**Dr. Rahul Shajan**  
**(Head, Department of**  
**Computer Applications)**

Submitted for the End Semester Examination held on \_\_\_\_\_

**Examiner 1 :**

:

**Examiner 2 :**

## **DECLARATION**

I Sreyas Satheesh, do hereby declare that the Data Structure Lab Record (20MCA135) is a record of work carried out under the guidance of Mr. Anish Augustine K, Asst. Professor, Department of Computer Applications, SJCET, Palai as per the requirement of the curriculum of Master of Computer Applications Programme of A P J Abdul Kalam Technological University, Thiruvananthapuram. Further, I also declare that this record has not been submitted, full or part thereof, in any University / Institution for the award of any Degree / Diploma.

Place: Choondacherry

Sreyas Satheesh

Date :

(SJC23MCA-2053)

## DEPARTMENT OF COMPUTER APPLICATIONS

### VISION

To emerge as a center of excellence in the field of computer education with distinct identity and quality in all areas of its activities and develop a new generation of computer professionals with proper leadership, commitment and moral values.

### MISSION

- Provide quality education in Computer Applications and bridge the gap between the academia and industry.
- Promoting innovation research and leadership in areas relevant to the socio economic progress of the country.
- Develop intellectual curiosity and a commitment to lifelong learning in students, with societal and environmental concerns.

### COURSE OUTCOMES:

After the completion of the course 20MCA135 Data Structure Lab the student will be able to :

<b>CO 1</b>	Use Debuggers, Profilers and advanced Compiler options.	K3 (Apply)
<b>CO 2</b>	Implement the Set and Disjoint Set Data Structures.	K3 (Apply)
<b>CO 3</b>	Understand the practical aspects of Advanced Tree Structures.	K2 (Understand)
<b>CO 4</b>	Realise Modern Heap Structures for effectively solving advanced Computational problems.	K3 (Apply)
<b>CO 5</b>	Implement Advanced Graph algorithms suitable for solving advanced computational problems.	K3 (Apply)

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