## VPM's B.N. Bandodkar College of Science Thane (Autonomous)
## S.Y.BSc Computer Science

Fundamentals of Algorithms                    Subject code: BNBUSCS4T1

### INDEX

| Sr.No. | Practical Aim | Date | Signature |
|--------|---------------|------|-----------|
| 1. | Write a Python program to perform matrix multiplication. Discuss the complexity of algorithms used. | | |
| 2. | Write a Python program to sort n names using the Quick sort algorithm. Discuss the complexity of algorithms used. | | |
| 3. | Write a Python program to sort n numbers using the Merge sort algorithm. Discuss the complexity of algorithms used. | | |
| 4. | Write a Python program for inserting an element into binary tree. | | |
| 5. | Write Python program for deleting an element (assuming data is given) from binary tree. | | |
| 6. | Write Python program for finding the smallest and largest elements in an array A of size n using Selection algorithm. | | |
| 7. | Write Python program for implementing Huffman Coding Algorithm. Discuss the complexity of algorithm | | |
| 8. | Write Python program for implementing Strassen's Matrix multiplication using Divide and Conquer method. | | |