**Government College of Engineering, Nagpur**

Sector 27, Mihan Rehabilition Colony Khapri(Railway), Nagpur, Maharashtra,

**Department of Computer Science & Engineering**

**Subject Code :BECSE402T** **Subject** :**Data Structure and Program Design-Lab**

Semester **– IV** Session **2022-2023**

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| **S.N** | **Name Of The Practical** |
| 1. | Write a program to search a list of N elements for the occurrence of the element,using Linear Search Method & Binary Search Method |
| 2. | Write a program to sort a list of N elements in ascending order by Bubble Sort & Selection Sort method |
| 3. | Write a program to sort a list of N elements in ascending order by Insertion Sort method |
| 4. | Write a program to carry out push and pop operation on the stack |
| 1.Push the elements onto the stack.  2.Pop the elements from the stack.  3.Display elements of stack. |
| 5. | Write a program to evaluate the Postfix expression. Given a postfix expression and evaluate that expression using stack |
| 6. | Write a program to carry out Insert and Delete Operations on the Queue.  1. Insert elements in the queue. 2. Display elements of queue.  3.Remove elements from the queue. |
| 7. | Write a program to implement Singly Linked List  1.Creation of link list.  2.Adding a node at first, middle, & last position of an linked list.  3. Deleting a node at first, middle, & last position of an linked list. |
| 8. | Write a program to implement the INORDER, PREORDER & POSTORDER traversal performed on the Binary Tree. |
| 9. | Write a program to implement Breadth first search in graphs. |
| 10. | Write a program to implement Depth first search in graphs. |

List of Practical

**Subject Teacher Head of Department**

**Ms.Neha Nagrale Dr. Latesh Bhagat**