

ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) B.VOC. Scheme of Examination & Syllabus 2024-25 SOFTWARE DEVELOPMENT

FIFTH SEMESTER

COURSE CODE	COURSE NAME	TH	TU	PR	CREDITS	EVALUATION		ATION
BV502P	Employability Skills-II Lab	-	-	3	3	CA	ESE	TOTAL
						25	25	50

COURSE OBJECTIVES	COURSE OUTCOMES
• To understand Data Structures & Algorithms	At the end of the course, students will be able to:
• To learn a practical approach of Data structures.	 CO1. Understand Data Structures & Algorithms CO2. Understand Linked Lists & searching techniques CO3. Understand Structures sorting CO4: Understand Graph and Tree Data Structure

List of Practical :

1. Write a program using data structure arrays for Insertion in an array element

- a) At the beginning
- b) At the end
- c) At any given index of an array.
- 2. Write a program using data structure arrays for deletion in an array element
 - a) At the beginning
 - b) At the end

3. Write a function that will concatenate two circularly linked lists, producing one circularly liked list.

4. Write a class that implements Bubble sorting algorithm on a set of 25 numbers.

5. Write a template class for sorting method. Using this class write a test program for sorting using different datatypes.

6. Implement the following Tree class member function Bool empty () const;

7. Program on Tree traversal.

8. Program on linear search and Binary search.

TEXT/ REFERENCE BOOKS

S.N	Title	Authors	Edition	Publisher
1	Introduction to Algorithms	Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein.	3rd	PHI
2.	Data strctures & Algorithms made easy	Narsimha Karumanchi	1st	Career monk
3.	Data Structure & algorithms	Prof. Dippanita Mondal	1st	Everest publishing house

- Bangarka	woshpande	oct-2022		APPLICABLE 2024-25	
CHAIRMAN- BoS	DEAN (ACADEMICS)	DATE OF RELEASE	VERSION		