Mumbai Education Trust's

INSTITUTE OF ENGINEERING, NASHIK. COMPUTER ENGINEERING DEPARTMENT

Subject : DSA <u>ASSIGNMENT NO – 06</u> Unit - VI

- 1. What is file? List different file opening modes in C++. Explain concept of inverted files.
- 2. What is Sequential and index sequential file organization? State its advantages and disadvantages.
- **3.** Explain any 4 modes of opening the file in C or C++.
- 4. Explain indexed sequential file organization. Compare it with direct access file
- 5. Explain inverted file & cellular partitions.
- 6. Explain direct access file organization. State its advantages and disadvantages.
- 7. Write short note on external sort.
- 8. Explain multilist files & coral rings.
- 9. Compare sequential, indexed sequential and direct access files.
- 10. Explain any 3 operations carried out on sequentail file and its pseudo code.
- 11. Explain following operations carried out on sequential files.
 - i) Add
 - ii) Delete
 - iii) Search
- 12. Write short notes on:
 - i) Factors affecting the file organization
 - ii) Indexed sequential files
 - iii) Indexing techniques

- 13. A write a C++ program to create a file. Insert records into the file by opening file in append mode. Search for a specific record into file.
- Sort the following elements using two way merge sort with m = 3.20, 47, 15, 8, 9, 4, 40, 30, 12, 17, 11, 56, 28, 35
- 15. A file of employees records, has 'employee no' as primary key and the 'department code' and the 'designation code' as the secondary keys. Write a procedure to answer the following query 'Which employees from systems department are above designation level 4?.