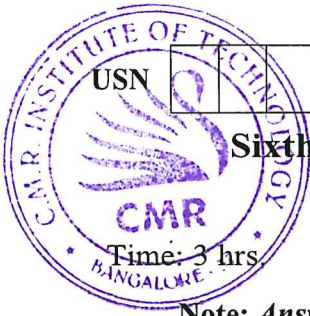


# CBCS SCHEME



## Sixth Semester B.E. Degree Examination, July/August 2022 File Structures

17IS62

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Write the difference between Physical and Logical File. (04 Marks)
- b. Explain the different File Processing Operations. (08 Marks)
- c. Explain the major strengths and weakness of CD - ROM. (08 Marks)

OR

- 2 a. What are File Structures? Explain the history of File Structure. (06 Marks)
- b. Explain the following : (06 Marks)
- i) Seek time ii) Rotational delay iii) Transfer time. (08 Marks)
- c. Explain the Buffer Management.

### Module-2

- 3 a. Explain Key – Sorting algorithm with example. (10 Marks)
- b. Explain how spaces can be reclaimed in files. (10 Marks)

OR

- 4 a. Explain the different Data Compression Techniques. (10 Marks)
- b. Explain a Simple Index for Entry – Sequenced file. (10 Marks)

### Module-3

- 5 a. Explain the Model for implementing the consequential processing and its applications to general ledger program. (10 Marks)
- b. Describe how merging is used to sort large files on the disk. (10 Marks)

OR

- 6 a. Explain Deletion , Merging and Redistribution in B – Trees with example. (10 Marks)
- b. Explain Virtual B – Tree and how to overcome page fault. (10 Marks)

### Module-4

- 7 a. Compare B + Tree and Simple Prefix B + Trees. (08 Marks)
- b. Explain the Internal structure of Index set blocks. (12 Marks)

OR

- 8 a. What is Sequence Set? Explain how it is maintained. Explain with an example adding a simple index to the sequence set. (10 Marks)
- b. Explain Simple Prefix B + Tree and the issues involved in maintenance of such trees. (10 Marks)

### Module-5

- 9 a. Explain the different Collision Resolution Techniques. (10 Marks)
- b. What is Hashing? Explain the different hashing functions, with an example. (10 Marks)

OR

- 10 a. What is Collision? Explain Collision Resolution by Progressive overflow. (10 Marks)
- b. Explain the Working of Extendible hashing. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

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