USN ☐☐☐☐☐☐☐☐☐☐ 06IS63

Sixth Semester B.E. Degree Examination, December 2010
File Structures

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions, selecting*
at least TWO questions from each part.

PART – A

1 a. Explain briefly the evolution of file structure design.   (06 Marks)
   b. Explain the different costs of disk access.   (04 Marks)
   c. Explain the functions OPEN, READ and WRITE with parameters.   (10 Marks)

2 a. Explain the different UNIX tools for sequential processing of files.   (10 Marks)
   b. What is the advantage of using inheritance for record buffer classes? Explain. (10 Marks)

3 a. What do you understand by index? Explain simple index for sequential files. (10 Marks)
   b. What is data compression? Explain different techniques available for data compression.
                                                                                   (10 Marks)

4 a. Explain object-oriented model for implementing co-sequential processes.   (10 Marks)
   b. Explain K-way merging algorithm.   (10 Marks)

PART – B

5 a. What are B-trees? Explain, with an example, the creation of B-trees.   (10 Marks)
   b. What are the properties of B-tree? Explain worst case-search.   (10 Marks)

6 a. Explain with an example adding a simple index to the sequence set.   (10 Marks)
   b. Explain simple prefix B^+ tree maintenance.   (10 Marks)

7 a. What is hashing? Write an hashing algorithm and explain with an example.   (10 Marks)
   b. Explain the different collision resolution techniques.   (10 Marks)

8 a. Explain how extendible hashing works.   (10 Marks)
   b. Explain dynamic hashing and linear hashing with figures.   (10 Marks)

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