2006 VISVESVARAYA TECHNOLOGICAL UNIVERSITY
FIFTH SEMESTER B.E DEGREE EXAMINATIONS
FILE STRUCTURE
(INFORMATION TECHNOLOGY)

JANU / FEBRU 2006

TIME: 3 HOUR
MAXIMUM MARK :100

Note: 1. Answer any Five full questions.

1. (a) Explain the following:

i) Physical file

ii) Opening file

iii) Logical file

iv) Reading and writing file

(b) Explain briefly the evolution of file structure.

(c) What are streams? Explain seeking with C++ stream classes in detail.

2. (a) Explain how data on the magnetic disk is organized with relevant sketches.

(b) Discuss the common methods of adding structures to files to maintain the identity of fields.

3. (a) Write on explanatory note on buffer management. Explain its importance.

(b) What do you mean by an index? Explain simple index for sequential file.

4. (a) Explain how co sequential processing is implemented in general ledger program.

(b) Explain heap sort with class definition function, insert and remove with an example.

5. (a) What is multilevel indexing? With an example explain the creation of B – trees.

(b) What are B – trees? Give formal definition of Btree properties. Calculate worst casesearch depth with steps and explanation.

6. (a) Explain how B+ tree file structure is used in indexsequential file organization.

(b) Explain the internal structure of index set blocks.

7. (a) What is hashing? Explain a simple hashing algorithm.

(b) Explain the various collision resolution techniques.

8. Write short notes on:

(a) Record organization

(b) Magnetic tapes

(c) Virtual B tree?

(d) Storage fragmentatic