

B.Tech II Year I Semester (R13) Supplementary Examinations June 2017

FILE STRUCTURES: AN OBJECT ORIENTED APPROACH

(Information Technology)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- What is the need of destructor?
 - List the disadvantages of pointers.
 - Give an example of copy constructor.
 - What are the various base class access specifiers?
 - What is a pure virtual functions?
 - Illustrate the use of 'typename' keyword of C++.
 - Compare B tree with B+ tree.
 - What factors contribute to the disk access time?
 - List the Unix tools for sequential processing of files.
 - What are the limitations of the key sort method?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 (a) Describe the general form of C++ program.
(b) What is an inline function? Give examples.

OR

- 3 (a) Write a C++ program to demonstrate passing objects as parameters to function and a function returning an object.
(b) Discuss type compatibility of pointers.

UNIT – II

- 4 (a) How to find the address of an overloaded function?
(b) Write a program to overload + = operator.

OR

- 5 What are the benefits of inheritance? Explain them with suitable program segments.

UNIT – III

- 6 Does C++ accomplish run-time polymorphism? Give necessary program to support your answer.

OR

- 7 (a) How to overload a generic function?
(b) What is a binary search tree? Give its properties.

UNIT – IV

- 8 Discuss buffer bottlenecks and various strategies for buffering.

OR

- 9 Write a program to create a file and store a string in it. Write program to read the string and display it to standard output.

UNIT – V

- 10 Explain any three approaches for data compression.

OR

- 11 (a) Why is it important to distinguish file access and file organization?
(b) When sequential search is good for files?
