PVP 14

Code: CS4T3

II B.Tech - II Semester – Regular/Supplementary Examinations – April 2019

FILE STRUCTURES
(COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART – A

Answer ***all*** the questions. All questions carry equal marks

11 x 2 = 22M

1.

a) Discuss logical file with examples in C and C++.
b) What are the different ways of detecting end of the file?
c) What is meant by disk as bottleneck?
d) Differentiate fields and records.
e) Explain random access of files.
f) What is an index?
g) What is entry-sequenced file?
h) What is meant by index set in indexed sequential file access?
i) What is B+ tree?
j) How does progressive overflow work?
k) What is Hash function?

PART – B

Answer any ***THREE*** questions. All questions carry equal marks.
3 x 16 = 48 M

2. a) Write a program to display the contents of a file in C++ . 8 M

   b) Explain about physical organization of magnetic tape and state the formula for estimating the tape length requirements. 8 M

3. a) Explain how variable length records are read from the files with suitable illustrations. 8 M

   b) What are the different types of field structures? 8 M

4. Construct an Indexed B tree of order 4 for following sequence of keys
   C G J X N S U O A E B H I F K L Q R T V W Z 16 M

5. a) What is indexed sequential file access? 8 M

   b) What are the factors that determine the block size in indexed sequential file access? 8 M

6. a) What is packing density? Write the formula for predicting collisions for different packing densities. 4 M

b) How can the performance of hashing be improved by using buckets? 4 M

c) Explain chaining with an example. 8 M