AR – 2512

Second Year Third Semester M. C. A. Examination

FILE STRUCTURES AND DATA PROCESSING

Paper - 3 MCA 2

(USC – 15520)

P. Pages : 2

Time : Three Hours] [Max. Marks : 80

Note : (1) Due credit will be given to neatness and adequate dimensions.
(2) Assume suitable data wherever necessary.
(3) Illustrate your answer wherever necessary with the help of neat sketches.
(4) Use pen of Blue/Black ink/refill only for writing the answer book.

1. (a) Write a program using C++ stream classes to list the content of file. 8

   (b) Explain in detail opening of file operation. Give the meaning of each arguments. 7

OR

2. (a) Explain the concept of clusters and Extents. 8

   (b) Explain with example organizing Tracks by Block. 7

3. What is Record structures ? Explain five method for organizing the records of a file. 13

OR

4. (a) What is sequential search ? How will you evaluate performance of sequential search ? 8

   (b) When sequential searching is Good ? Explain. 5

5. (a) Explain any three method of Data Compression. 9

   (b) What is an index ? Explain in detail. 4

OR

6. (a) What is meant by reclaiming the space in file ? Explain in detail. 8

   (b) Compare Binary search versus sequential search. 5

7. (a) Give with example application of the heap-building algorithm. 7

   (b) Explain Tapes versus Disks for External sorting. 6

OR

8. (a) Explain with example a selection Tree for merging large numbers of lists. 7

   (b) Write the features of merging as a way of sorting large files on Disk. 6

9. (a) Explain paged binary tree. What are the problem associated with paged tree ? Explain briefly. 7

   (b) Explain indexed sequential file access in brief. 6

OR

10. (a) What is B* trees ? Explain in detail. 7

    (b) Explain the searching method in B-tree. 6

11. What is Hashing ? Explain with example. Explain with example fold and add Hashing algorithm. 13

OR

12. (a) Explain Collision Resolution by Progressive overflow in detail. 7

    (b) What is Buckets ? Explain with example. 6