

M.C.A. IInd Year Third Semester (CGS)
15520 : File Structures & Data Processing : 3 MCA 2

P. Pages : 2

Time : Three Hours



AV - 3275

Max. Marks : 80

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

1. a) Explain the concept of clusters and Extents. 8
b) Explain in details the organization of Disks. 7

OR

2. a) How will you detect End-of-file in C++ stream? Explain in detail C stream seek function. 8
b) Explain with example organizing Tracks by Block. 7
3. a) What is Record key? Explain in detail. 7
b) What is sequential search? When sequential searching is good? Explain. 6

OR

4. What is field structure? Explain four method for maintaining the identity of fields in record by giving example. 13
5. a) What is data compression? Explain the main objective behind data compression. 5
b) What is secondary key? Explain retrieval of records using combination of secondary keys by giving example. 8

OR

6. a) Explain the concept of selective indexes and binding. 7
b) Explain the operations required to maintain an indexed file. 6
7. a) Explain with example sorting and merging utilities in Unix. 7
b) What is heap? Give the properties of heap. 6

OR

8. a) Give the summary of the consequential processing model. 7
b) Explain Tapes versus Disks for External sorting. 6

9. a) Explain Paged Binary tree. What are the problems associated with paged tree? Explain in brief. 7
- b) Give the formal definition of B-tree properties. 6

OR

10. a) Explain in detail B* trees. 7
- b) How AVL tree is better than a simple Binary search tree? 6
11. a) Explain how extendible hashing works? 7
- b) Explain any two collision Resolution techniques. 6

OR

12. What is Hashing? Explain in detail by giving example. Explain with example "Fold and Add" Hashing algorithm. 13
