



BABU MADHAV INSTITUTE OF INFORMATION TECHNOLOGY, UTU

Integrated M.Sc.(IT)

Semester-I

060010110 | CC2 Database Management Systems |

Question Bank-Unit: 01

Unit-1: File Organization and Structure

Short Questions [1 Mark]

1. Which memory is relatively small to manage by the computer system?
2. How Flash memory differs from main memory?
3. List at least four data storage devices, which use NAND flash memory.
4. What is the capacity to store data in Blu-ray disk?
5. Give the full form of WORM.
6. Why the disk storage is referred to as direct-access storage?
7. Define Blocks.
8. What is "Free List"?
9. What is data dictionary?

or
What do you mean by system catalog?
10. Which statistical and descriptive data about the relations may store in database?

Short Questions [2 Marks]

1. What is flash memory? In which storage devices it is used?
2. List primary and secondary storage media.
3. Draw the storage device hierarchy.
4. List and explain different types of file organization in short.
5. Define "offset" and "length" in variable-length attribute.
6. What header contain at the beginning of each block of information?
7. Give at least three differences between Fixed-Length and Variable-Length records.
8. What is search key? How pointer is used with search-key?
9. What kind information that must be stored in the database system?
10. Write necessary information that is to be stored about each index on each of the relations.

or
Which types of information about indices are stored in database system?



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11. Consider the following structure of the file and perform the following steps:

Header				
Record 0	10101	Deep	Computer Science	65000
Record 1	15151	Nimesh	Singing	40000
Record 2	45452	Raj	Finance	80000
Record 3	98989	Kalpesh	Marking	85000
Record 4	28282	Priya	Music	45000
Record 5	34343	Bhavik	Finance	80000

- Insert(12121, Parth, Music, 45000).
- Delete record 2.
- Insert(54545, Naman, Computer Science, 65000).

Long Questions [5 Marks]

- List and explain several types of data storage exist in computer system.
or
Write a note on Physical Storage Media.
or
Write a note on Storage device.
- Explain Fixed-Length records in detail.
or
How insertion and deletion take place for files of fixed-length records?
- How Variable-Length records arise in database system? Explain in detail.
or
Explain the representation of variable-length record.
or
How Variable-Length record works in database system?
- Explain the several possible ways of organizing records in files.
- Write a note on sequential file organization.
or
Explain organization of sequential file in details.
- Describe multitable clustering file organization with proper example.
- Write a note on Data-Dictionary Storage.