MANAV RACHNA UNIVERSITY, FARIDABAD
Department of Computers Science And Engineering

Course: B.Tech　　　　　**Semester: III**
Session: 2021-22　　　　　**Subject: Database Management System (CSH202B-T)**

Tutorial: 03

Learning Outcome CO1: *Student will be able to* understand the need of database.

1. List four examples of database systems other than those listed in slides.

2. Define the terms :
   a) Data
   b) Database
   c) Database management system
   d) Meta data
   e) Data independence
   f) Data abstraction

3. Describe the functions that should be provided by a database management system.

4. What are the important responsibilities of a DBA?

5. Explain, giving example, why concurrency control techniques play an important role?

6. Describe the three schema architecture. Why do we need mappings between schema levels?

7. List significant differences between a file-processing system and a DBMS.

8. Name 4 DBMS packages along with the companies whose product they are.

9. What is the difference between controlled and uncontrolled redundancy? Illustrate with example.

Extendible Hashing Practice Questions

1. Suppose that extendable hashing is being used on a database file that contains records with the following search key values: 2, 3, 5, 7, 11, 17, 19, 23, 29, 31

Course: B.Tech   **Semester: III**
Session: 2021-22   **Subject: Database Management System (CSH202B-T)**

a) Construct the extendable hash structure for this file if the hash function is $h(x) =$ x mod 7 and each bucket can hold three records.