

# **DBMS**

## **BSC(MPCs,MSCs) –Semester 4**

### **Unit1**

- 1) Define DBMS? What are the advantages and disadvantages of DBMS?
- 2) Define DBMS, File based system ? what are the differences them?
- 3) What are the components of DBMS?
- 4) Explain about three schema architecture (OR) ANSI ,SAPRC architecture ?
- 5) Define Data Model ? What are the types of Data models?
- 6) Define relational algebra ? what are the operations in Relational algebra?

### **Unit-2**

- 1) Define SQL ? what are the features of SQL?
- 2) What are the data types of SQL ?
- 3)What are the SQL commands ? what are the DDL ,DML,DCL,DQL commands ?
- 4)Explain about integrity constraints ?
- 5)Explain about Index ? How to create and remove index in DBMS?
- 6) Explain about views ? How to create and remove views  
in DBMS?
- 7)Explain about grouping clauses (OR) explain about a)Group by b) order by c) having clauses ?
- 8)what are joins ? Explain about left and right joins?

### **Unit-3**

- 1) Define ER Model ? what are the notations and symbols in ER Model ?
- 2)what is mapping constraints ? Explain it ?
- 3)Define Keys ? what are the types of keys in dbms?
- 4)explain about the following ters:  
a)Generalisation b) Specialisation c) aggregation d)composition
- 5)Define Functional dependency and types ?

6) Explain about Normalization ? what are the types of normal forms ?

7) Explain about Decomposition ?

8) Explain about dependency , multi valued dependency , join dependency?

9) Explain about fan trap and chasm trap in ER model ?

#### **Unit-4**

1) what are the ACID properties in DBMS? What are the states available in it?

2) Explain about 2 Phase Locking(2 PL ) protocol and time stamp based protocol?

3) Explain about Deadlock?

4) Explain about backup and recovery system in DBMS?

5) Explain about database and security ?

6) Explain about RAID (Redundancy Array of Independent Risks ) levels ?