

DATABASE MANAGEMENT SYSTEMS

(Common to CSE and IT)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What is a data model? List the types of data model used.
 - (b) What are attributes? Give examples.
 - (c) Define weak and strong entity sets.
 - (d) What is embedded SQL? What are its advantages?
 - (e) What are the ACID properties?
 - (f) What are the time stamps associated with each data item?
 - (g) What is database tuning?
 - (h) What is functional dependency?
 - (i) What is 2NF?
 - (j) What is indexing and what are the different kinds of indexing?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Explain the Overall Structure of Data base management system.

OR

- 3 What is ER diagram? Explain the terms of ER diagram and draw the ER diagram for library management system.

UNIT – II

- 4 (a) Explain about Composition of Relational Operations.
(b) Explain about Domain Relational Calculus.

OR

- 5 Explain about Multi-valued dependencies and Fourth Normal Form.

UNIT – III

- 6 Explain about Embedded SQL.

OR

- 7 Explain about schemas and triggers in DBMS.

UNIT – IV

- 8 Explain about several types of ordered indexes.

OR

- 9 Briefly explain about B+ tree index file.

UNIT – V

- 10 Explain about concurrency control.

OR

- 11 Define the time stamp? Explain time stamp based protocol.
