

2021
B.E. (Information Technology)
Fifth Semester
ITE-501: Database Management Systems

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Explain the following terms:-

- a) Benefits of DBMS
- b) Atomicity
- c) Data models
- d) Schema
- e) Indexing

(5x2)

UNIT – I

II. a) Discuss the role of DBA.

b) Explain the benefits of DBMS over file system.

(2x5)

III. a) Construct an ER diagram for office management system.

b) What is the difference between relational algebra and relation calculus? Explain any one with fundamental operations.

(4,6)

IV. Explain all integrity constraints with syntax and example for each.

(10)

UNIT – II

V. Explain the difference between FD and FFD with example. Also explain that in which normal form this concept is used.

(10)

VI. Explain cursors, its types and attributes with example for each.

(10)

VII. What is schedule? What are the necessary conditions to avoid inconsistency in a transaction?

(10)

x-x-x