

H

Roll No.

TCS-402/TIT-402

B. TECH. (CS/IT) (FOURTH SEMESTER) MID SEMESTER EXAMINATION, 2018 DATABASE MANAGEMENT SYSTEM

Time : 1 : 30 Hours

Maximum Marks : 50

Note : (i) This question paper contains two Sections.

(ii) Both Sections are compulsory.

Section—A

1. State True or False : (1×5=5 Marks)
 - (a) "Drop table" result can be rolled back.
 - (b) Data Inconsistency is the main feature of DBMS.
 - (c) A table can have many Foreign keys.
 - (d) A column cannot be added once a table is created.
 - (e) An ER diagram cannot have more than 4 Entities.

2. Attempt any *five* parts : (3×5=15 Marks)

Define the following :

- (a) Simple and Derived attributes

(2) TCS-402/TIT-402

- (b) Candidate Key
- (c) Data Modeling
- (d) Domain
- (e) Flat File
- (f) Not Null constraint

Section—B

3. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) Write a note on historic development of DBMS. Give examples.
 - (b) List and explain advantages and features of DBMS. Also define DBMS.
 - (c) Before development of DBMS, how data was managed by programs ? What were its limitations and drawbacks ?
4. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) Draw an ER diagram of a Doctor's Clinic assuming patients, Doctor and appointment. Also explain all the symbols of ERD in detail.
 - (b) List and explain various components of a typical DBMS in detail.

F. No. : a-37

(3)

- (c) What is SQL ? List its features. Also write SQL queries for the following :
 - (i) Create an "Employee" table with primary key.
 - (ii) Add a column "AadharNumber" in "Employee" table.
 - (iii) Remove all data from "Employee" table.
5. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) What is DML ? Explain various DML statements using SQL examples.
 - (b) Why "Relational DBMS" is called so ? Discuss the properties of RDBMS table.
 - (c) Explain Primary key, Foreign key and Unique key using SQL examples.

TCS-402/TIT-402

F. No. : a-37

430