



TONTADARYA COLLEGE OF ENGINEERING

(Department of Computer Science and Engineering)

Internal Assessment – I (18CS53)

Chetan C. Bogali

Subject : Database Management System
Semester : V SEM

Date : 13-11-2021
Time : 09.30 to 11.00pm

Answer following questions choosing one question from each part

Total Marks: 50

PART-A

CO

- Q1. a) List and briefly explain the characteristics of Database Approach 12M (CO1)
b) With a neat block diagram, explain the architecture of a typical DBMS. 13M (CO1)

OR

- Q2. a) List and briefly explain the advantages of using DBMS Approach 12M (CO1)
b) With a neat diagram, explain the Three Schema Architecture 13M (CO1)

PART-B

CO

- Q3. a) Define the following with an example: 12M (CO1)
(i) Weak entity type (ii) primary key (iii) cardinality ratio
(iv) candidate key (v) attribute (vi) DDL
b) Develop an ER diagram for keeping track of information about a company database taking into account atleast five entities. 13M (CO1)

OR

- Q4. a) Define the following with an example: 12M (CO1)
i) Snapshot (ii) metadata (iii) database
(iv) database schema (v) database management system (vi) DML
b) A university registrar's office maintains data about the following entities: (a) courses, including number, title, credits, syllabus, and prerequisites; (b) course offerings, including course number, year, semester, section number, instructor(s), timings, and classroom; (c) students, including student-id, name, and program; and (d) instructors, including identification number, name, department, and title. Further, the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled. Construct an E-R diagram for the registrar's office. 13M (CO1)

Course Outcome	Complete Title
CO1	Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS.