



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (April/May 2019)

School: School of Engineering

Program: BCA (DS)

Course: Relational Database Management System

Course Code: CSC-120

Semester: II

Max Marks: 50

Duration (mins): 90

Section A

Q1. Answer the following. (Any Five)

10 Marks

- Define DBMS.
- What do you mean by Save Points?
- Write down the difference between physical and logical data dependency.
- Define weak entity set.
- What do you mean by ACID properties?
- Explain BCNF?
- Write a short note on total participation.

Section B

Q2. Answer the following (Any Four)

20 Marks

- Explain all five Aggregate Function with its syntax.
- Define & explain normalization with its types.
- Draw and explain E-R Model, also note down all notations
- Describe transaction processing with neat and clean suitable diagram.
- Elaborate the Five roles of DBA.
- Explain basic six operations of relational algebra?

Section C

Q3. Answer the following (Any Two)

20 Marks

- a. Define Primary Key? List eight difference between the database approach v/s Traditional file accessing approach.
- b. Draw and explain the Database architecture diagram.
- c. Consider the following employee database

Employee(emp-name, street, city)

Works(emp-name, company-name, salary)

Company(company-name, city)

Manager(emp-name, manager-name)

Write expression in SQL for the following queries

- 1) Find the name of all employees who work for "ABC".
 - 2) Find all employees in the database who do not work for ABC corporation
 - 3) Modify the database so that "Ravi" now lives in "Bhopal".
 - 4) Find the name of all employees those name starts with "K" and ends with "A"
- d. What do mean by Concurrency? Explain two phase locking Protocol.
