**Academic Year: 2021-2022 (Even Semester)**

**BE (CSE) CIE –I**

Subject: Database Management System Subject Code: PC403CS

Semester: 4 Section: 1,2,3 Time: 1 hr

Faculty: GSS, MVRJ, KKL Marks: 20

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| Q.No. | Part – A (3 x 2 = 6 Marks) | Max  Marks | CO | BL | PIs |
| 1 | Define Data Independence . Explain the difference between Physical and Logical Data Independence. | 2 | 1 | 1,2 | 4.6.4 |
| 2 | Explain Weak Entity and Strong Entity with example. | 2 | 1 | 1,2 | 4.3.1 |
| 3 | Define Candidate key and Super key with examples. | 2 | 2 | 2,3 | 4.3.2 |

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| Q.No. | Part – B (2 x 7 = 14 Marks) | Max  Marks | CO | BL | PIs |
| 4 | 1. Explain briefly about Database Architecture. 2. Explain the difference between File processing system and DBMS. | 4  3 | 1 | 1,2,4 | 4.3.1 |
| 5 | a) Explain Codd Rules in detail.  b) Differentiate between 3NF and BCNF with examples. | 4  3 | 2 | 1,2,3 | 4.3.3 |
| 6 | Consider the Employee table and Department table with following fields:  EMP(ENO,ENAME,SAL,DEPTNO, HIREDATE)  DEPT(DEPTNO, DNAME, LOC) Write a query to retrieve Departments who have less than 2 employees working in it. (2M)Write a query to retrieve duplicate records from a table. (2M)Write a query to fetch the department-wise count of employees sorted by department’s count in ascending order. (3M) | 7 | 2 | 1,2,3 | 4.3.2 |

***LEGEND:*** *BL – Bloom’s Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 –Analysing, 5 – Evaluating,*

*6 - Creating); CO – Course Outcomes ; PIs– Performance Indicators such as 1.2.1/13.1*

**Academic Year: 2021-2022 (Even Semester)**

**BE (CSE) CIE – I (Quiz – I)**

Subject: Subject Code:

Semester: Section: Time: 10 Mins

Faculty: Marks: 05