Reg. No: .....
Name : .....

K20P 9101

FIRST SEMESTER MSc. Computer Science DEGREE CCSS-REGULAR EXAMINATION NOVEMBER 2020

(2020 Admission onwards)

MSCCS01C04:ADVANCED DATABASE MANAGEMENT SYSTEM

Time: 3Hours **Maximum Marks: 60**

PART A *(Answer any **five** questions. Each question carries **3** marks)*

1. **Define sub-queries**
2. **Write a note on Graph Database.**
3. **Write the syntax of the DELETE command in SOL**
4. **Define Data Integration**
5. **Write a note on Mobile databases.**
6. **Write a note on Relational model.**

PART B *(Answer any **three** questions. Each question carries **5** marks)*

7. **Discuss Assertions and Triggers in DBMS.**
8. **Test the output of comparison between tables and views**
9. **Define an integrity constrain. What is the role of a foreign key in maintaining integrity?**
10. **Explain the importance of NOT NULL Constraint in SQL with example**
11. **Consider the following relational database ; employee (employee_name, street, city) works(employee_name, company_name, salary) conpany(company_name, city) manager (employee_name,manager_name) Give an SQL DDL definition of this database. Identify the suitable referential integrity constraints that should hold and include them in the DDL definition**

PART C *(Answer any **three** questions. Each question carries **10** marks)*

12. a. **Explain Date Built-in functions with example** **4-marks**

    b. **Explain different joined relations in SQL with examples.** **6-marks**

13. a. **Analyse the working of key-value store databases.** **6-marks**

b. **Explain the benefits of Column Databases** **4-marks**

14. a. **State about SELECT operation and its clauses in Relational Algebra.** **6-marks**

b. **List the basic steps in query processing.** **4-marks**

15. a. **Explain about various data models used to describe the design of a database.** **5-marks**

b. **Distinguish between Instances and Schemas.** **5-marks**

16. a. **Explain the different Multimedia Data Formats** **4-marks**

b. **Analyse the intrinsic imperfections of the data in Geographic Information Systems** **6-marks**
