

Roll No.B446065.....

3030

**B. Tech 3rd Semester (CSE)
Examination – December, 2019**

DATABASE MANAGEMENT SYSTEMS

Paper : PCC-CSE-201-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting at least *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. (a) What are the Components of DBMS ? $2.5 \times 6 = 15$
- (b) Discuss Security issues involved in database design.
- (c) What is Cascade rollback ?
- (d) What do you mean by insertion anomaly ?
- (e) What is lossless decomposition ? Give an example.
- ~~(f)~~ What is referential integrity constraint ?

UNIT - I

2. Differentiate between DBMS and file processing system. 15
3. Describe the various views of data. 15

UNIT - II

4. (a) Explain the different approaches used for designing relational database. 7.5
(b) Why normalization is required ? Explain 1NF, 2NF, 3NF and BCNF with example. 7.5
5. What are the steps involved in query processing ? Why query processing are to be optimized ? Show with an example how queries are optimized. 15

UNIT - III

6. Give an example to depict the time stamp based method for handling concurrently running transactions. 15
7. (a) Explain Concurrency control in distributed database system. 7.5

- (b) What is difference between hashing and indexing ? 7.5

UNIT -- IV

8. (a) Explain briefly the database security for integrity of database. 7.5
- (b) Explain web database. 7.5
9. (a) List and discuss the different issues related to database security. 7.5
- (b) What is data warehouse and its usage ? 7.5
-

AB → C
C → D