## 251405

## May, 2019 <br> MBA - IV SEMESTER <br> Relational Data Base Management System (MBA/EC-212) <br> Time : 3 Hours] <br> [Max. Marks : 75

Instructions :

1. It is compulsory to answer all the questions ( 1.5 marks each) of Part-A in short.
2. Answer any four questions from Part-B in detail.
3. Different sub-parts of a question are to be attempted adjacent to each other.

## PART-A

1. (a) What do you mean by the term Database? (1.5)
(b) What is a key?
(c) Differentiate between generalization and specialization.
(d) What is query processing?
(e) Differentiate logical and physical level of database.
(f) What is a candidate key?
(g) What are data control permissions?
(h) What do you mean by selection and projection
operator?
(i) What are the different types of join?
(j) Differentiate between primary key and foreign key.

## PART-B

2. What is an ER Diagram? Also, explain various types of attributes? Draw an ER diagram for Hospital Management.
3. (a) Explain the various features of Oracle 8 i in detail.
(b) Define Triggers. Explain its types.
4. What is normalization? Explain 1NF,2NF,3NF with example. Differentiate between $3 N F$ and BCNF.
5. (a) Discuss data storage formats on disk.
(b) Explain in detail the granting and revoking rules of DBMS.
6. (a) How backup and recovery is done in database? (8)
(b) Explain how security can be done in database.
7. Consider the following scheme for a library

BOOKS(DocId, Title, Publisher, Year)
STUDENTS(StId, StName, Major, Age)
AUTHORS(AName, Address)
borrows(DocId, StId, Date)
has-written(DocId, AName)
Write the queries for :
(a) List the year and title of each book.
(b) List all information about students whose major is CS.
(c) List all books published by McGraw-Hill before 1990.
(d) Rename AName in the relation AUTHORS to Name.
(e) List the name of those authors who are living in Davis.

