

END TERM EXAMINATION

SECOND SEMESTER [BBA] MAY- JUNE 2016

Paper Code: BBA-108

Subject: Database Management System

BBA (B&I)-108

BBA (TTM)-108

BBA (MOM)-108

Time: 3 Hours

Maximum Marks: 75

Note: Attempt any five questions including Q.No1 which is compulsory.

- Q1 Attempt all: - (3x5=15)
- (a) List the two advantages of DBMS over the file system.
 - (b) What is data model also define Relational data Model.
 - (c) What is meant by data abstraction? What is the need of abstraction?
 - (d) Define candidate key with the help of an example.
 - (e) What is the difference between database schema and database state.
- Q2
- (a) Write the difference between logical view independence and physical view independence. (8)
 - (b) Explain the Architecture of DBMS. (7)
- Q3
- (a) What are the features of E-R Modeling? Draw an E-R model for the Hospital Management System. (10)
 - (b) What is meant by cardinalities? How we map the cardinalities in E-R diagram. (5)
- Q4
- (a) What are Codd's twelve rules? Explain any five. (7)
 - (b) What is meant by referential integrity constraint in Relation Database? (3)
 - (c) What is a View in Database. How is it different from the table? What are the different operations which are not performed on views? (5)
- Q5
- Discuss the Normal forms (1st, 2nd, 3rd) and also explain the meaning of functional dependency in database. (15)
- Q6
- (a) What is meant by de-composition of a table? (2)
 - (b) A relation *info* is defined as follows. (3)
info (name, street, city, state, postal code) where name is unique, and for any given postal code, there is just one city and state a. Give a set of FDs for this relation. (3)
 - (c) Write syntax for Unary relation operations. (3)
 - (d) What is need for normalization of database? How can we achieve the normalized database. (7)
- Q7
- (a) What are the different DML commands in SQL. (3)
 - (b) Explain the following with the help on en example. (8)
 - (i) Insert Command
 - (ii) Delete Command
 - (iii) Update Command
 - (iv) Constraint as assertions
 - (c) What are the aggregate operators in SQL? Write a query using any aggregate operator in SQL. (4)

- Q8 (a) What is meant by structured query language. What are its advantages? (2)
- (b) What is Sql Query for these statements. (4x2=8)
Book_author(book-id), Name of author, age, book-name)
- Find the "names of authors" from the relation "**Book_author**" where the age of author are greater than 50.
 - Delete a row from the relation "Book_author" where the Name of the Author is John.
- (c) What is meant by nested Queries in Sql. Give an Example of Nested query. (5)